Service
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Service Manual

Horizontal Frequency
28-80 kHz

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SAFETY NOTICE

ANY PERSON ATTEMPTING TO SERVICE THIS CHASSIS MUST FAMILIARIZE HIMSELF WITH THE CHASSIS AND BE AWARE OF THE NECESSARY SAFETY PRECAUTIONS TO BE USED WHEN SERVICING ELECTRONIC EQUIPMENT CONTAINING HIGH VOLTAGES.

CAUTION: USE A SEPARATE ISOLATION TRANSFOMER FOR THIS UNIT WHEN SERVICING

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Revision List

Revision	Date	Revision History	TPV Model
A00	Jun.-19-06	First Version Release	T786KCDDKS4SNP

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Important Safety Notice

Proper service and repair is important to the safe, reliable operation of all SONY Company Equipment. The service procedures recommended by SONY and described in this service manual are effective methods of performing service operations. Some of these service operations require the use of tools specially designed for the purpose. The special tools should be used when and as recommended.

It is important to note that this manual contains various CAUTIONS and NOTICES which should be carefully read in order to minimize the risk of personal injury to service personnel. The possibility exists that improper service methods may damage the equipment. It is also important to understand that these CAUTIONS and NOTICES ARE NOT EXHAUSTIVE. SONY could not possibly know, evaluate and advise the service trade of all conceivable ways in which service might be done or of the possible hazardous consequences of each way. Consequently, SONY has not undertaken any such broad evaluation. Accordingly, a servicer who uses a service procedure or tool which is not recommended by SONY must first satisfy himself thoroughly that neither his safety nor the safe operation of the equipment will be jeopardized by the service method selected.
Hereafter throughout this manual, SONY Company will be referred to as SONY.

WARNING

Use of substitute replacement parts, which do not have the same, specified safety characteristics may create shock, fire, or other hazards.

Under no circumstances should the original design be modified or altered without written permission from SONY. SONY assumes no liability, express or implied, arising out of any unauthorized modification of design.
Servicer assumes all liability.

FOR PRODUCTS CONTAINING LASER:
DANGER-Invisible laser radiations when open AVOID DIRECT EXPOSURE TO BEAM.
CAUTION-Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
CAUTION -The use of optical instruments with this product will increase eye hazard.

TO ENSURE THE CONTINUED RELIABILITY OF THIS PRODUCT, USE ONLY ORIGINAL MANUFACTURER'S REPLACEMENT PARTS, WHICH ARE LISTED WITH THEIR PART NUMBERS IN THE PARTS LIST SECTION OF THIS SERVICE MANUAL.
Take care during handling the LCD module with backlight unit
-Must mount the module using mounting holes arranged in four corners.
-Do not press on the panel, edge of the frame strongly or electric shock as this will result in damage to the screen.
-Do not scratch or press on the panel with any sharp objects, such as pencil or pen as this may result in damage to the panel.
-Protect the module from the ESD as it may damage the electronic circuit (C-MOS).
-Make certain that treatment person’s body is grounded through wristband.
-Do not leave the module in high temperature and in areas of high humidity for a long time.
-Avoid contact with water as it may a short circuit within the module.
-If the surface of panel becomes dirty, please wipe it off with a soft material. (Cleaning with a dirty or rough cloth may damage the panel.)

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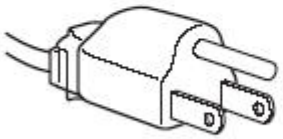
1. Precaution

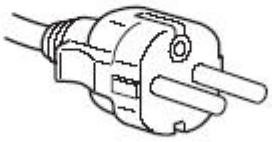
Warning on power connections

- Use the supplied power cord. If you use a different power cord, be sure that it is compatible with your local power supply.
  For the customers in the U.S.A.
  If you do not use the appropriate cord, this monitor will not conform to mandatory FCC standards.
  For the customers in the UK
  If you use the monitor in the UK, be sure to use the appropriate UK power cord.

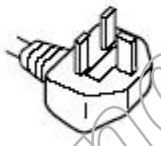
Example of plug types



for 100 to 120 V AC



for 200 to 240 V AC



for 240 V AC only

The equipment should be installed near an easily accessible outlet.

Installation

Do not install or leave the monitor:

- In places subject to extreme temperatures, for example near a radiator, heating vent, or in direct sunlight. Subjecting the monitor to extreme temperatures, such as in an automobile parked in direct sunlight or near a heating vent, could cause deformations of the casing or malfunctions.
- In places subject to mechanical vibration or shock.
- Near any equipment that generates a strong magnetic field, such as a TV or various other household appliances.
- In places subject to inordinate amounts of dust, dirt, or sand, for example near an open window or an outdoor exit. If setting up temporarily in an outdoor environment, be sure to take adequate precautions against airborne dust and dirt. Otherwise irreparable malfunctions could occur.

Place this unit on a flat surface. Do not place it on an uneven surface like the edge of a desk. If a part of this unit sticks out from such surface, it may fall or cause damaged and injury.

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Handing the LCD screen

- Do not leave the LCD screen facing the sun as it can damage the LCD screen. Take care when you place the monitor by a window.
- Do not push on or scratch the LCD screen. Do not place a heavy object on the LCD screen. This may cause the screen to lose uniformity or cause LCD panel malfunctions.
- If the monitor is used in a cold place, a residual image may appear on the screen. This is not a malfunction. The screen returns to normal as the temperature rises to a normal operating level.
- If a still picture is displayed for a long time, a residual image may appear for a while. The residual image will eventually disappear.
- The LCD panel becomes warm during operation. This is not a malfunction.

Maintenance

- Be sure to unplug the power cord from the power outlet before cleaning your monitor.
- Clean the LCD screen with a soft cloth. If you use a glass cleaning liquid, do not use any type of cleaner containing an anti-static solution or similar additive as this may scratch the LCD screen's coating.
- Clean the cabinet, panel, and controls with a soft cloth lightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent, such as alcohol or benzine.
- Do not rub, touch, or tap the surface of the screen with sharp or abrasive items such as a ballpoint pen or screwdriver. This type of contact may result in a scratched picture tube.
- Note that material deterioration or LCD screen coating degradation may occur if the monitor is exposed to volatile solvents such as insecticide, or if prolonged contact is maintained with rubber or vinyl materials.

Transportation

- Disconnect all cables from the monitor and grasp both side of the LCD display firmly taking care not to scratch the screen when transporting. If you drop the monitor, you may be injured or the monitor may be damaged.
- When you transport this monitor for repair or shipment, use the original carton and packing materials.

Installation on a wall or a mounting arm

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If you intend to install the display on a wall or a mounting arm, be sure to consult qualified personnel.

Disposal Of The Display

- **Do not dispose of this display with general household waste.**
- **The fluorescent tube used in this display contains mercury. Disposal of this display must be carried out in accordance to the regulations of your local sanitation authority.**

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2. Specification

2.1 Product Specification

LCD Panel	Driving system	TFT LCD
	Size	17.0"
	Type	CLAA170EA07Q
	Pixel pitch	0.294mm(H) x 0.294mm(V)
	Viewing angle(CR≥10)	140(H) 130(V) (typ)
	Luminance	300 cd/m^2 (typ)
	Pixel Arrangement	R.G.B Vertical Stripe
	Contrast Ratio	500:1 (typ)
	Response time	8ms (typ)
	Display colors	16.2 million Colors
	Max dimension	Horizontal: 337.9mm Vertical: 270.3mm
Input signals	R G B Analog	0.7Vp-p, 75, positive
	SYNC signal	TTL level, 2.2 KΩ
	Horizontal frequency	28kHz~80kHz (Analog)
	Vertical rate	56-75Hz (Analog)
	Recommend resolution	1280 x 1024
Power consumption	Normal operation	≤38W
	Active off (deep sleep)	≤1W
	Power off	≤1W
Power supply	AC voltage	100~240VAC,50~60Hz
Operating condition	Temperature	5-35°C
	Humidity	10-80%
	Altitude	0-4000m
Dimensions (width / height / depth)		369x423.5x225mm

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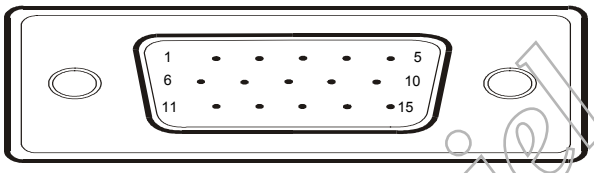
2.2 Interface Description

Analog connectors

NO.	Description	NO.	Description
1.	Red Video	9.	+5V
2.	Green Video	10.	Detect Cable
3.	Blue Video	11.	NC
4.	GND	12.	SDA
5.	Sensor for PC	13.	Horizontal Sync
6.	Red GND	14.	Vertical Sync
7.	Green GND	15.	SCL
8.	Blue GND		
VGA Connector layout			
			

2.3 Factory Preset Mode

Resolution	Frequency (KHz)	Vertical (Hz)	Clock (MHZ)
720 × 400	31.500	70.156	28.350
640 × 480	31.469	59.940	25.175
640 × 480	35	66.667	30.240
640 × 480	37.500	75	31.500
720 × 480	35.162	59.901	31.505
800 × 600	35.156	56.250	36
800 × 600	37.879	60.317	40
800 × 600	48.077	72.188	50
800 × 600	46.875	75	49.500
832 × 624	49.725	74.553	57.285
1024 × 768	48.363	60.004	65
1024 × 768	53.946	66.110	71.640
1024 × 768	56.476	70.069	75
1024 × 768	60.023	75.029	78.750
1024 × 768	60.241	74.927	80
1152 × 864	67.500	75	108
1152 × 870	68.681	75.062	100
1152 × 900	61.795	65.950	92.940

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1152 × 900	71.732	76.068	105.590
1280 × 960	60	60	108
1280 × 1024	63.981	60.020	108.00
1280 × 1024	79.976	75.025	135.00

2.4 Panel Specification

2.4.1 General Specification

ITEM	SPECIFICATION
Display Area(mm)	337.920(H)x270.336(V) (17.0-inch diagonal)
Number of Pixels	1280(H)x1024(V)
Pixel Pitch(mm)	0.264(H)x0.264(V)
Color Pixel Arrangement	RGB vertical stripe
Display Mode	normally white, TN
Number of Colors	16.2M(6 Bit+FRC)
Brightness(cd/m^2)	300 cd/m^2(Typ.)(Center point, Lamp current=7.0 mA)
Viewing Angle	140/130(Typ.)
Surface Treatment	Anti-glare
Electrical Interface	LVDS , 2Ch
Total Module Power(W)	20.0 (Typ.)
Optimum Viewing Angle	6 o'clock
Module Size(mm)	358.5(W)x296.5(H)x17.5(D)
Module Weight(g)	2000(typ)
Backlight Unit	CCFL, 4 tables, edge-light(top*2/bottom*2)

2.4.2 Optical Characteristics

ITEM		SYMBOL	CONDITION	MIN.	TYP.	MAX.
Contrast Ratio		CR	$\theta = \phi = 0°$	450	500	--
Luminance	Center	L	$\theta = \phi = 0°$	250	300	--
	Uniformity	ΔL	$\theta = \phi = 0°$	75%	--	--
Response Time		Tr	$\theta = \phi = 0°$	--	3	6
		Tf	$\theta = \phi = 0°$	--	5	10
Viewing Angle	Horizontal	ϕ (L/R)	CR≧5	80/80	-85/85	--
	Vertical	θ(D/U)		80/80	-85/85	--
	Horizontal	ϕ (L/R)	CR≧10	65/65	-70/70	--
	Vertical	θ(D/U)		60/60	-67/63	--
Color Coordinates	White	Wx Wy	$\theta = \phi = 0°$	0.283 0.299	0.313 0.329	0.343 0.359
	Red	Rx Ry		0.614 0.308	0.644 0.338	0.674 0.368
	Green	Gx Gy		0.240 0.572	0.270 0.602	0.300 0.632
	Blue	Bx By		0.110 0.054	0.140 0.084	0.170 0.114
Image sticking		Tis	2 hour			2
Crosstalk		CT				1.5%
Gamut		CS		70%	72%	
Gamma		γ	GL(32-223)	2.0	2.3	2.6
Maximun dark luminance				-	0.6	0.7
Color temperature		Tc		-	6500	-

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2.4.3 Electrical Characteristics

TFT-LCD

ITEM		SYMBOL	MIN	TYP	MAX	UNIT
Power Supply Voltage for LCD		Vin	4.5	5.0	5.5	V
Power Supply Current for LCD		Iin	-	700	950	mA
Permissive Input Ripple Voltage		VRP	-	-	100	mVp-p
Differential impedance		Zm	90	100	110	Ω
Logic input Voltage LVDS:IN+ , IN-	Common Mode Voltag	VCM	1.125	1.25	1.375	V
	Differential Input Voltage	|VID|	250	350	450	mV
	Threshold Voltage(High)	VTH	-	-	100	mV
	Threshold Voltage(Low)	VTL	-100	-	-	mV
I rush Current		Irush			3	A

Backlight

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
Lamp Voltage	VL	540	600	660	Vrms
Lamp Current	IL	3	7	7.5	mArms
Interter Frequency	FL	45	50	65	kHz
Starting Lamp Voltage	VS	1710	--	--	Vrms
		1320	--	--	Vrms

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3. OSD Operation

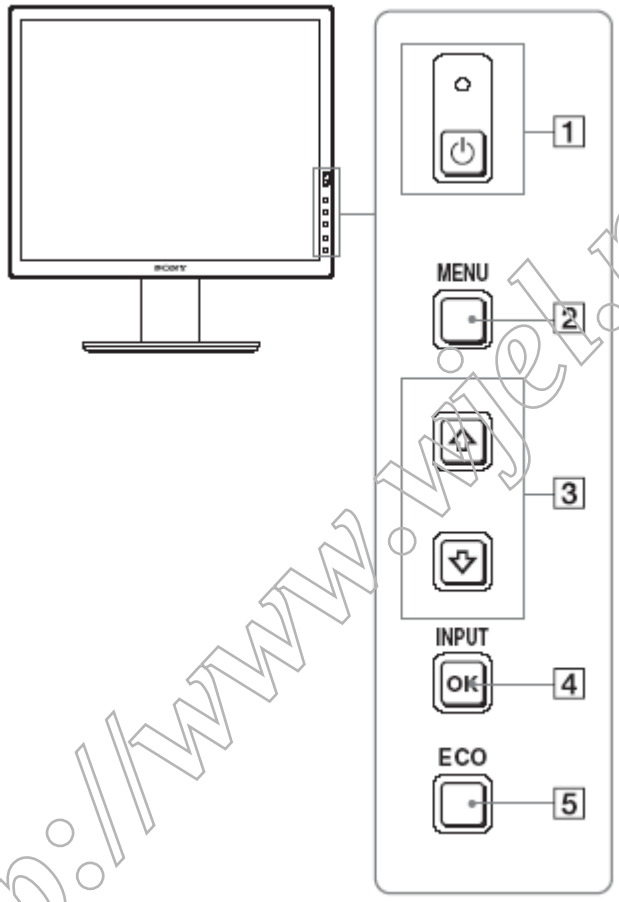
3.1 Generalization

Press the power button to turn the monitor on or off. The control buttons are located at the right side of the monitor. By changing these settings, the picture can be adjusted to your personal preferences.

- The power cord should be connected.
- Connect the video cable from the monitor to the video card.
- Press the power button to turn on the monitor, the power indicator will light up.

3.2 Key Control

Front of the display



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1 ⏻ **Power Switch and indicator:** To turn the display on or off, press the Power Switch. The power indicator lights up in green when the display is turned on, and lights up in orange when the monitor is in power saving mode.

2 **Menu Button:** This button displays or close the main menu.

3 ⬇/⬆ **Button:** These buttons are used to select the menu items and make adjustments.

4 **OK Button:** This button selects the item or executes the settings in the menu.

Input button (SDM-S76D/ SDM-S96D/ SDM-V76D/ SDM-V96D/ SDM-S76F/ SDM-S96F only): this button switches the video input signal between INPUT 1 and INPUT 2 when two computers are connected to the display.

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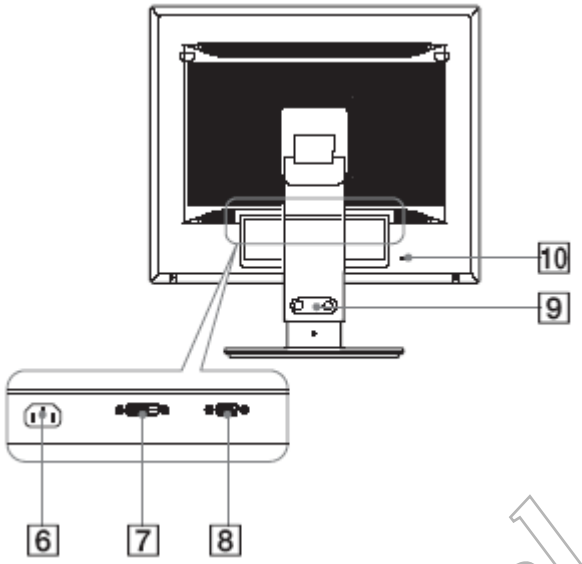
5 **ECO button:** This button is used to reduce the power consumption.

Rear of the display



6 **AC IN connector:** connect the power cord.

7 **DVI-D input connector** (SDM-S76D/ SDM-S96D/ SDM-V76D/ SDM-V96D/ SDM-S76F/ SDM-S96F only): the connector inputs digital RGB video signals that comply with DVI Rev.1.0.

8 **HD15 input connector:** this connector inputs analog RGB video signals (0.7 Vp-p, positive) and SYNC signals.

9 **Cable holder** (SDM-S76F/SDM-S96F only): this part secures cables and cords to the display.

10 **Security lock hole:** the security lock hole should be applied with the Kensington Micro Save Security System. Micro Save Security System is a trademark of Kensington.

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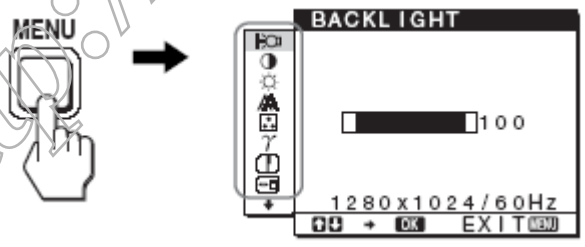
3.3 Common adjustment

NO	Icon	Tag	Description
1		Backlight	Adjust the brightness of the backlight
2		Contrast	Adjust the picture contrast
3		Brightness	Adjust the picture brightness (black level)
4		Screen	Adjust the picture's sharpness or its centering
5		Color	Adjust the color temperature of the picture
6	γ	Gamma	Change the picture's color shade settings
7		Sharpness	Adjust to sharpen the edge of images
8		Menu position	Change the on screen menu position
9		Language	Chance the language used on menus or messages
10		Reset	Reset the adjustments to the default settings
11		Menu lock	Lock the control of buttons to prevent accidental adjustments or resetting

3.4 Navigating The Menu

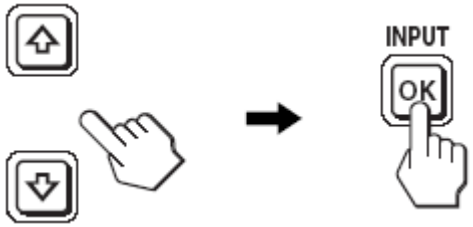
1. Display the main menu.

Press the MENU button to display the main menu on your screen.



2. Select the menu you to adjust

Press the ↓/↑ buttons to display the desired menu. Press the OK button to select the menu item.



3. Adjust the menu

Press the ↓/ ↑ buttons to make the adjustment, then press the OK button. When you press the OK button, the

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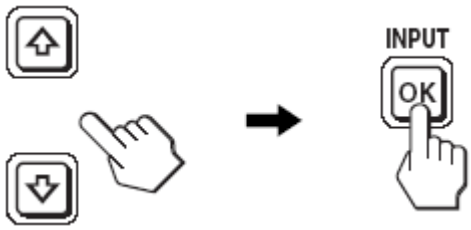
setting is stored, then the display returns to the previous menu.

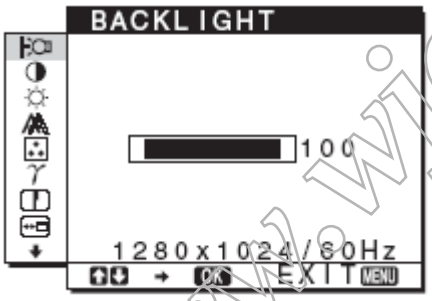


4. Close the menu

Press the MENU button once to return to normal viewing. If no buttons are pressed, the menu closes automatically after about 45 seconds.

3.5 Adjustment Steps Of Main Menu

1. Adjusting the backlight (BACKLIGHT)



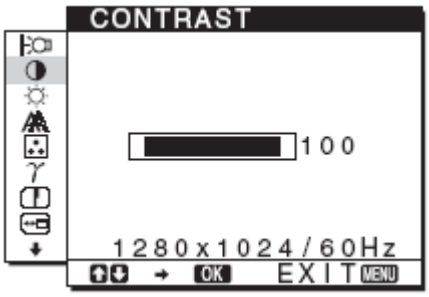
If the screen is too bright, adjust the backlight and make the screen easier to see.

1 **Press the MENU button.**
The main menu appears on the screen.

2 **Press the ↓/↑ buttons to select (BACKLIGHT) and press the OK button.**
The BACKLIGHT menu appears on the screen.

3 **Press the ↓/↑ buttons to adjust the light level and press the OK button.**

2. Adjusting the contrast (CONTRAST)



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Notes

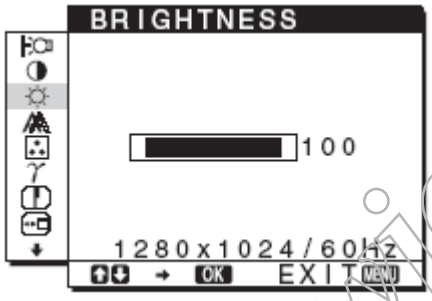
- The contrast cannot be adjusted when the ECO mode is set to HIGH, MIDDLE, or LOW
- While COLOR is set to sRGB, you cannot adjust CONTRAST, BRIGHTNESS or GAMMA.

1 Press the MENU button.
The main menu appears on the screen.

2 Press the ↓/↑ buttons to select ◑ (CONTRAST) and press the OK button.
The CONTRAST menu appears on the screen.

3 Press the ↓/↑ buttons to adjust the contrast and press the OK button.

3. Adjusting the black level of an image (BRIGHTNESS)



Notes

- The brightness cannot be adjusted when the ECO mode is set to HIGH, MIDDLE, or LOW
- While COLOR is set to sRGB, you cannot adjust CONTRAST, BRIGHTNESS or GAMMA.

1 Press the MENU button.
The main menu appears on the screen.

2 Press the ↓/↑ buttons to select ☼ (BRIGHTNESS) and press the OK button.
The BRIGHTNESS menu appears on the screen.

3 Press the ↓/↑ buttons to adjust the brightness and press the OK button.

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Adjusting to the desired brightness

Pressing the ECO button, you can change the brightness of the screen. Each time you press the ECO button, the ECO mode changes as follows.

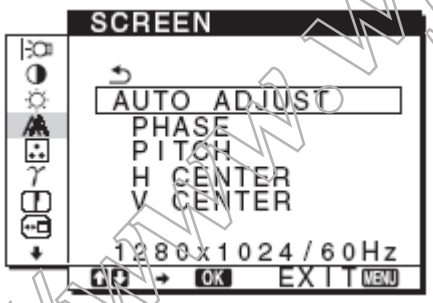
HIGH ⟶ MIDDLE ⟶ LOW ⟶ USER ⟶ HIGH ...

The brightness of the screen will decrease as the ECO mode setting changes from HIGH to LOW.
If you select USER, you can adjust the backlight level by pressing the ↓/↑ buttons, the same as when you select BACKLIGHT using the menu.

Only while the ECO mode is set to USER, are the BACKLIGHT, CONTRAST, and BRIGHTNESS items of the menu available

4. Adjusting the picture's sharpness and centering (SCREEN)

(Analog RGB signal only)



■ **Automatic picture quality adjustment function**

When the display receives an input signal, it automatically adjusts the picture's position and sharpness (phase/pitch), and ensures that a clear picture appears on the screen

■ **Make further automatic adjustments to the picture quality for the current input signal (AUTO ADJUST)**

1 Press the MENU button.
The main menu appears on the screen.

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2 Press the ↓/↑ buttons to select (SCREEN) and press the OK button.
The SCREEN menu appears on the screen.

3 Press the ↓/↑ buttons to select AUTO ADJUST and press the OK button.
The AUTO ADJUST menu appears on the screen.

4 Press the ↓/↑ buttons to select OFF or ON and press the OK button.
- OFF: When OFF is selected and the OK button is pressed, AUTO ADJUST makes the appropriate adjustments and its values are stored in the memory.
  Note
  AUTO ADJUST works automatically when the received resolution is different from the stored one in the monitor.
- ON: When the monitor is turned on or the input signal is changed, AUTO ADJUST makes the automatic adjustments.

5 Press the ↓/↑ buttons to select ⮌ and press the OK button.
Return to the menu screen.

■ Adjust the picture's sharpness and position manually (PITCH/PHASE/H CENTER/ V CENTER)

You can adjust the picture's sharpness as follows. This adjustment is effective when the computer is connected to the monitor's HD15 input connector (analog RGB).

1 Set the resolution to 1280 × 1024 on the computer.

2 Load the CD-ROM.

3 Start the CD-ROM, and display the test pattern.
For Windows User
When Auto run operates:
Click Display Adjustment tool (Utility).
Click "Adjust" and confirm the resolution and then click "Next".
Test pattern for PITCH and PHASE appears in order.
When Auto run fails to operate:
1 Open "My Computer" and right click the CD-ROM icon. Go to "Explorer" and open the CD-ROM icon.
2 Open [Utility] and then select [Windows].
3 Start [Win_Utility.exe].
Test pattern appears.
For Macintosh User
1 Open [Utility] and then select [Mac].
2 Start [Mac_Utility.exe].
Test pattern appears.

4 Press the MENU button.
The main menu appears on the screen.

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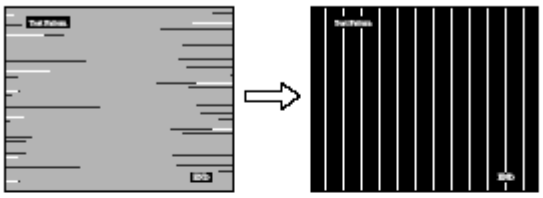
5 **Press the ↓/↑ buttons to select (SCREEN) and press the OK button.**
The SCREEN menu appears on the screen.

6 **Press the ↓/↑ buttons to select PHASE and press the OK button.**
The PHASE adjustment menu appears on the screen.

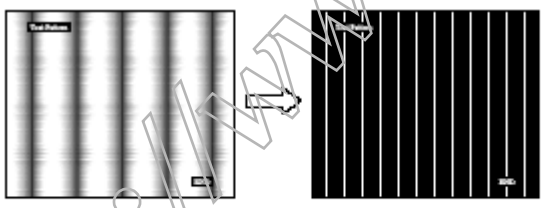
7 **Press the ↓/↑ buttons until the horizontal stripes are at a minimum.**
Adjust so that the horizontal stripes are at a minimum.



8 **Press the OK button.**
The main menu appears on the screen.
If vertical stripes are observed over the entire screen, adjust the pitch using the following procedures.

9 **Press the ↓/↑ buttons to select PITCH and press the OK button.**
The PITCH adjustment menu appears on the screen.

10 **Press the ↓/↑ buttons until the vertical stripes disappear.**
Adjust so that the vertical stripes disappear.



11 **Click END on the screen to turn off the test pattern.**

■ Adjust the picture's position manually (H CENTER /V CENTER)

If the picture is not in the center of the screen, adjust the picture's centering as follows.

1 **Set the resolution to 1280 × 1024 on the computer.**

2 **Load the CD-ROM.**

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3 **Start the CD-ROM, and display the test pattern.**
For Windows User
When Auto run operates:
Click Display Adjustment tool (Utility).
Click "Adjust" and confirm the resolution and then click "Next".
Test pattern for H CENTER and V CENTER appears in order.
When Auto run fails to operate:
1 Open "My Computer" and right click the CD-ROM icon. Go to "Explorer" and open the CD-ROM icon.
2 Open [Utility] and then select [Windows].
3 Start [Win_Utility.exe].
Test pattern appears.
For Macintosh User
1 Open [Utility] and then select [Mac].
2 Start [Mac_Utility.exe].
Test pattern appears.

4 **Press the MENU button.**
The main menu appears on the screen.

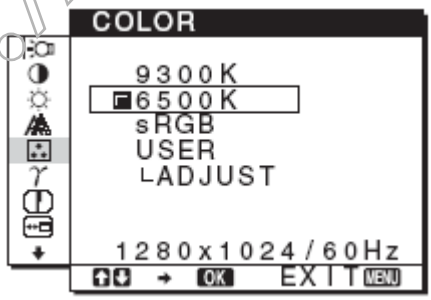
5 **Press the ↓/↑ buttons to select (SCREEN) and press the OK button.**
The SCREEN menu appears on the screen.

6 **Press the ↓/↑ buttons to select H CENTER or V CENTER and press the OK button.**
The H CENTER adjustment menu or V CENTER adjustment menu appears on the screen.

7 **Press the ↓/↑ buttons to center the test pattern on the screen.**

8 **Click END on the screen to turn off the test pattern.**

5. Adjusting the color temperature (COLOR)



1 **Press the MENU button.**
The main menu appears on the screen.

2 **Press the ↓/↑ buttons to select (COLOR) and press the OK button.**
The COLOR menu appears on the screen.

3 **Press the ↓/↑ buttons to select the desired color temperature and press the OK button.**

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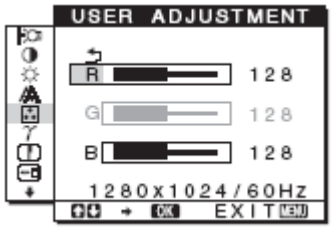
6. Fine tuning the color temperature (USER ADJUSTMENT)

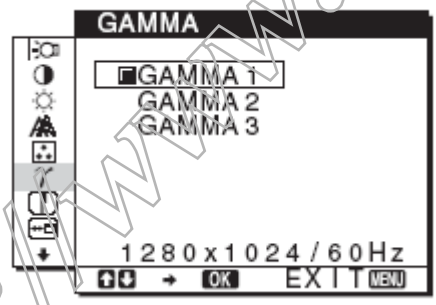


1 **Press the ↓/↑ buttons to select ADJUST and press the OK button.**
The USER ADJUSTMENT menu appears on the screen.

2 **Press the ↓/↑ buttons to select R (Red) or B (Blue) and press the OK button. Then press the ↓/↑ buttons to adjust the color temperature and press the OK button.**
Since this adjustment changes the color temperature by increasing or decreasing the R and B components with respect to G (green), the G component is fixed.

3 **Press the ↓/↑ buttons to select ⮌, then press the OK button.**
The new color setting is stored in memory for USER and automatically recalled whenever USER is selected.
The main menu appears on the screen.

6. Changing the gamma setting (GAMMA)



1 **Press the MENU button.**
The main menu appears on the screen.

2 **Press the ↓/↑ buttons to select γ (GAMMA) and press the OK button.**
The GAMMA menu appears on the screen.

3 **Press the ↓/↑ buttons to select the desired mode and press the OK button.**

7. Adjusting the sharpness (SHARPNESS)

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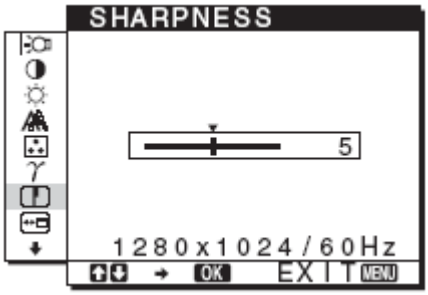
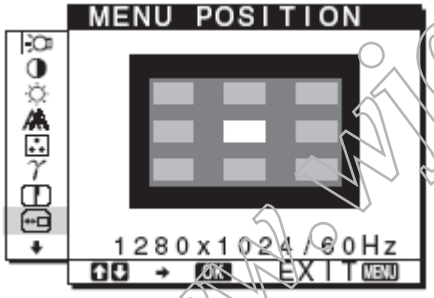


1 **Press the MENU button.**
The main menu appears on the screen.

2 **Press the ↓/↑ buttons to select (SHARPNESS) and press the OK button.**
The SHARPNESS menu appears on the screen.

3 **Press the ↓/↑ buttons to adjust the sharpness and press the OK button.**

8. Changing the menu's position (MENU POSITION)



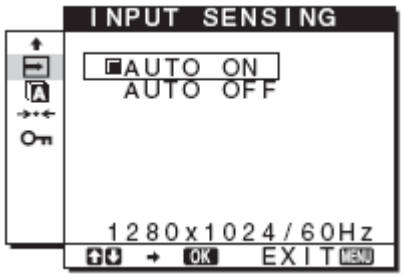
1 **Press the MENU button.**
The main menu appears on the screen.

2 **Press the ↓/↑ buttons to select (MENU POSITION) and press the OK button.**
The MENU POSITION menu appears on the screen.

3 **Press the ↓/↑ buttons to select the desired position and press the OK button.**
There are three positions each for the top, center and bottom of the screen.

9. Changing the input automatically（INPUT SENSING）

（SDM-S76D/ SDM-S96D/ SDM-V76D/ SDM-V96D/ SDM-S76F/ SDM-S96F only）



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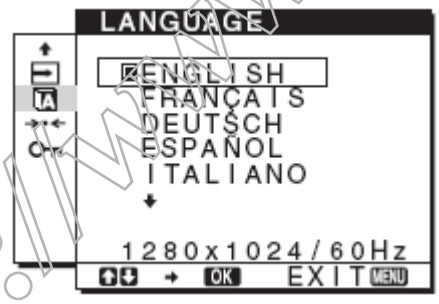
1 Press the MENU button.
The main menu appears on the screen.

2 Press the ↓/↑ buttons to select ⇨ (INPUT SENSING) and press the OK button.
The INPUT SENSING menu appears on the screen.

3 Press the ↓/↑ buttons to select the desired mode and press the OK button.

- AUTO ON: When the selected input terminal has no input signal, or when you select an input terminal by the INPUT button on the display and the terminal has no input signal, the on-screen message appears (page 17) and the display checks the input signal to another input terminal automatically to change the input.
  When the input is changed, the selected input terminal is displayed on the left upper of the screen.
  When there is no input signal, the display goes into the power saving mode automatically.
- AUTO OFF: The input is not changed automatically. Press the INPUT button to change the input.

10. Selecting the on-screen menu language (LANGUAGE)



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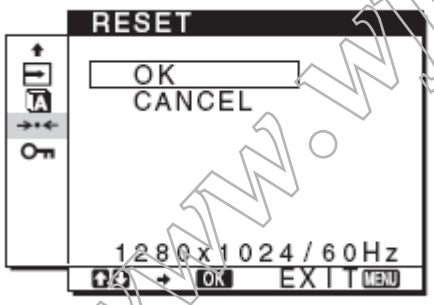
1 Press the MENU button.
The main menu appears on the screen.

2 Keep pressing the ↓ button until the icon of the desired option item appears.

3 Press the ↓/↑ buttons to select 🅰 (LANGUAGE) and press the OK button.
The LANGUAGE menu appears on the screen.

4 Press the ↓/↑ buttons to select a language and press the OK button.
- ENGLISH
- FRANÇAIS: French
- DEUTSCH: German
- ESPAÑOL: Spanish
- ITALIANO: Italian
- NEDERLANDS: Dutch
- SVENSKA: Swedish
- РУССКИЙ: Russian
- 日本語: Japanese
- 中文: Chinese

11. Additional settings



■ Resetting the adjustment data to the defaults

You can reset the adjustments to the default settings.

1 Press the ↓/↑ buttons to select ⇢ (RESET) and press the OK button.
The RESET menu appears on the screen.

2 Press the ↓/↑ buttons to select the desired mode and press the OK button.
- OK: To reset all of the adjustment data to the default settings. Note that the 🅰 (LANGUAGE) setting is not reset by this method.
- CANCEL:To cancel resetting and return to the menu screen.

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■ Locking the menus and controls

You can lock the control of buttons to prevent accidental adjustments or resetting.

1 Press the ↓/↑ buttons to select (MENU LOCK) and press the OK button.

The MENU LOCK menu appears on the screen.

2 Press the ↓/↑ buttons to select ON or OFF and press the OK button.

- ON: Only the ⏻ (power) switch will operate. If you attempt any other operation, the (MENU LOCK) icon appears on the screen.
- OFF: Set (MENU LOCK) to OFF. If you set the (MENU LOCK) item to ON, only this menu item can be selected.

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3.6 Adjustment Of Service OSD

1. Procedures of entering into service mode.

1) Plug the AC cable firstly.

2) Press "down" key and Power key simultaneity

3) Press "MENU" key to enter the service menu.

4) Press the “DOWN” or “UP” key to select the icon “S” and press “OK” key to enter into the service OSD.

5) Press the "MENU" key to exit OSD.

6) Turn off the power and then turn it on again. The monitor then enters the normal mode. To enter the service again, repeat the procedure described above.

Note

W/B readjustment is required after the panel, board and microcomputer are replaced. However, be sure to perform aging for more than 30 minutes for RGB reset before W/B adjustment.

2. Setup

1) Prepare timing and pattern data for a signal generator according to the Sony timing specifications.

2) Connect a monitor video cable to the signal generator.

3) Put Color Analyzer (ex. CA-210) 50cm away from the monitor, specify it vertically in the center of the display, and adjust the focus to the optimum level using an eyepiece.

4) Put the monitor and Color Analyzer (ex. CA-210) in a light-shielded room.

5) Set up [SERVICE MODE] of the monitor.

3. Operation

Data is manually set to improve the productivity. The brightness, contrast, and backlight are set to 50, 90 and 100 respectively. After that, the default data of the color temperature to be adjusted is set.

4. Warm up time

Warm up for 30 minutes before performing any adjustment.

5. Adjustment for White Balance

a. Display five white block and black block pattern VGA/60Hz (Input level 0.73V).

b. Set up [SERVICE MODE].

c. Click "WHITE BALANCE" and then select "AUTO".

d. Prepare timing and full white pattern.

6. 9300K color adjustment

a. Set up [SERVICE MODE].

b. Select "9300K" in "COLOR TEMP" and enter.

c. Use a 100% IRE white video field in the SXGA mode.

d. Adjust "R，G，B” value with 9300K as spec, 9300K:x=250+-25 y=255+-25 Y=20+-20

e. Press "MENU" key to exit adjust mode.

7. 6500K color adjustment

a. Set up [SERVICE MODE].

b. Select "6500K" in "COLOR TEMP" and enter.

c. Use a 100% IRE white video field in the SXGA mode.

d. Adjust "R，G，B " value with 6500K as spec, 6500K/ SRGB: x=280+-25 y=295+-25 Y=20+-20

e. Press "MENU" key to exit adjust mode.

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8. SRGB color adjustment

a. Select "SRGB" in "COLOR TEMP" and enter.

b. Adjust SRGB R/G/B value to the value of 6500K RGB

9. Service OSD

The service OSD menu contains additional menus as described below.

1) COLOR TEMP: Adjust R/G/B Color values of contrast and brightness in 9300k, 6500k,User color mode.
2) INITIAL EEPROM: Initialize white balance default value.
3) CLR ETI: ETI counter shall be reset to 0H by activating this function.
4) AGING: Enable to set the monitor in the Aging mode or exit from the mode. Select aging mode. (On/off)
5) WHITE BALANCE: Auto
6) DEFAULT TIMING: select the resolution timing of the signal. Menu is 1152 X 864(VESA standard timing) 1152 x 870 (MAC computer timing).
7) MODULE: Panel type

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4. Disassembly flow chart

4.1 Disassembly steps

Notices

1. Lay the monitor on a steady table with a piece of clean cloth mat under it for preventing scratching the panel.
2. Be careful when open the bezel and rear cover with the tool that mentioned above for preventing mangling them.
3. Put away the screws for preventing rolling on the panel and scratching it.
4. Be careful and don't scratch the connection line when open the shield.
5. Press the interface with a hand and pull or insert the connection line with the other.

Flow Chart

Step	Figure	Description
Prepare		Put the monitor on a clean soft cloth with panel facing to the table, and then remove the four screws on the rear cover.
Remove the rear cover		Pay attention to the top of the rear cover marked by red round, open them with a thin card, and then you will see two screws. Unscrew the four screws.

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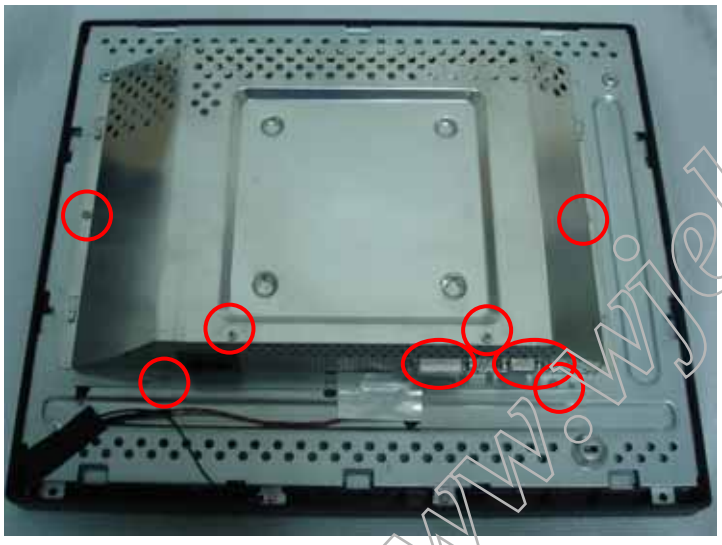
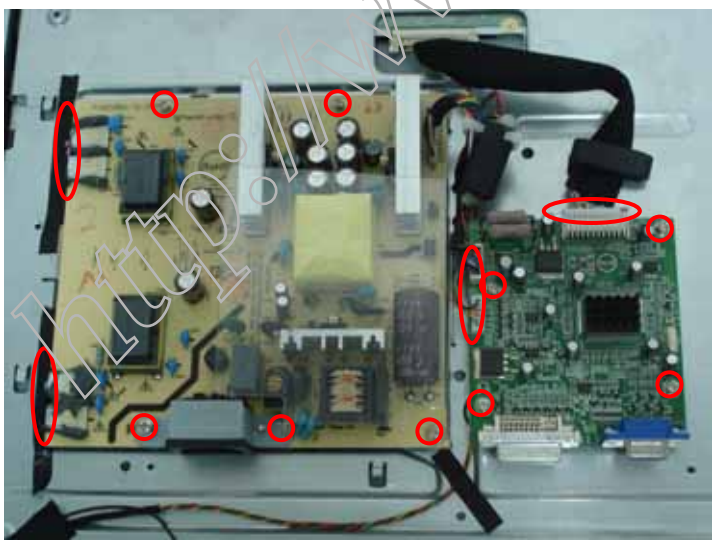
Remove the rear cover		Pay attention to the hooks use a thin card to open the rear cover
Remove the shield		Remove the ten screws, and then remove the shield. Remark: there's DVI connecter only for SDM-S76D/S76F/S96D/S96F
Take apart the main and power board		Remove the four screws disconnect the three interfaces on the main board and five screws and four interfaces on the power board.

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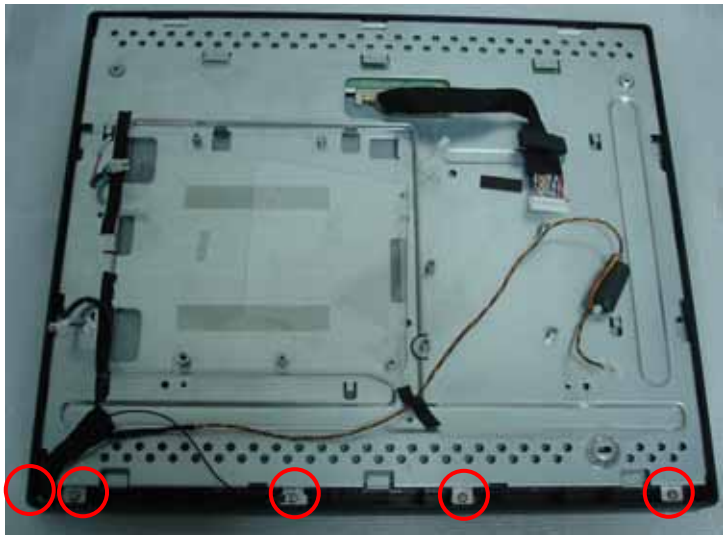
Remove the bezel		Remove the four screws and disconnect the interface from keypad.
		Pay attention to the hooks, open them as the arrowheads point.
		The bezel with a keypad

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The panel		Only the panel

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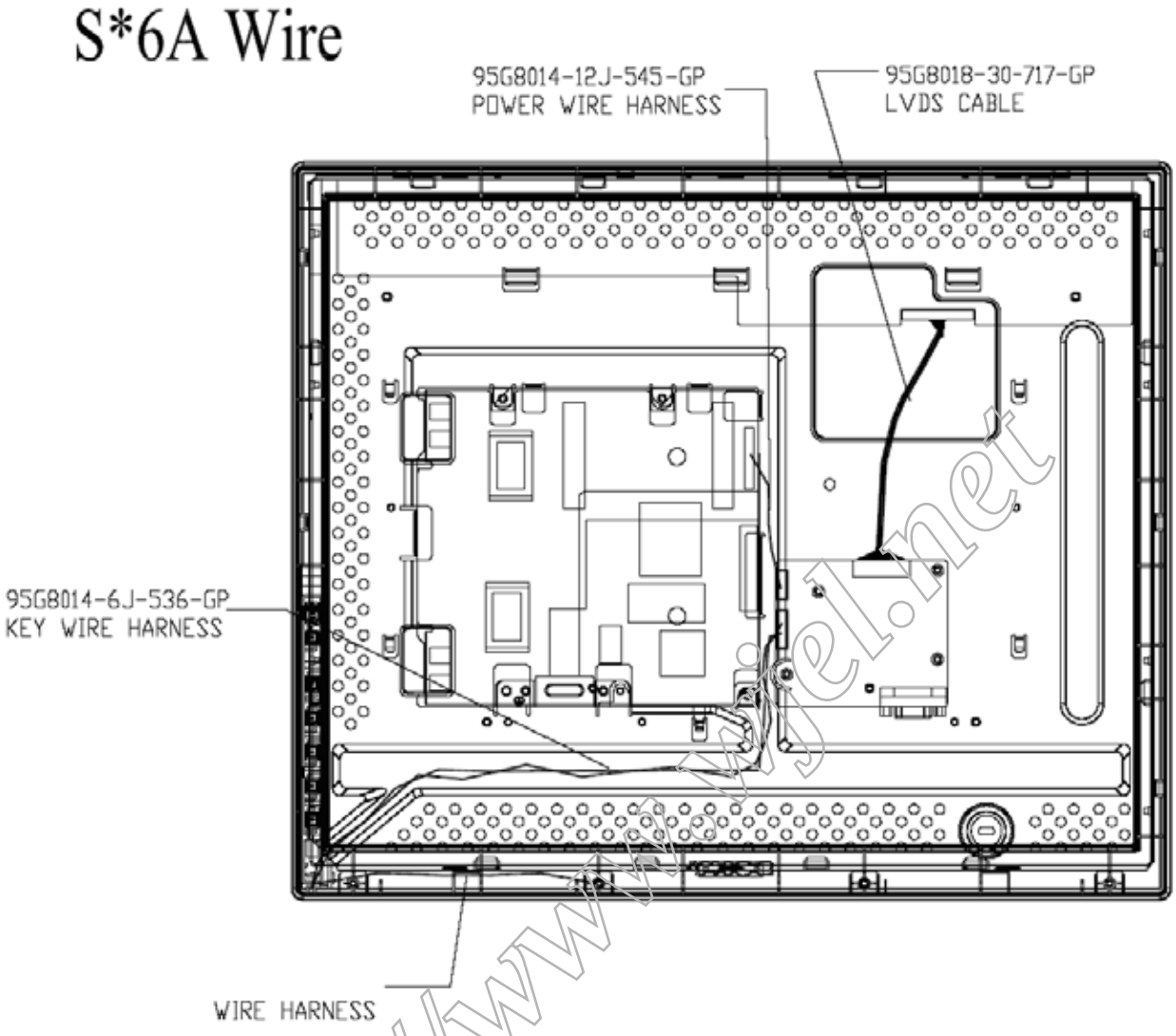
4.2 Wiring Diagram



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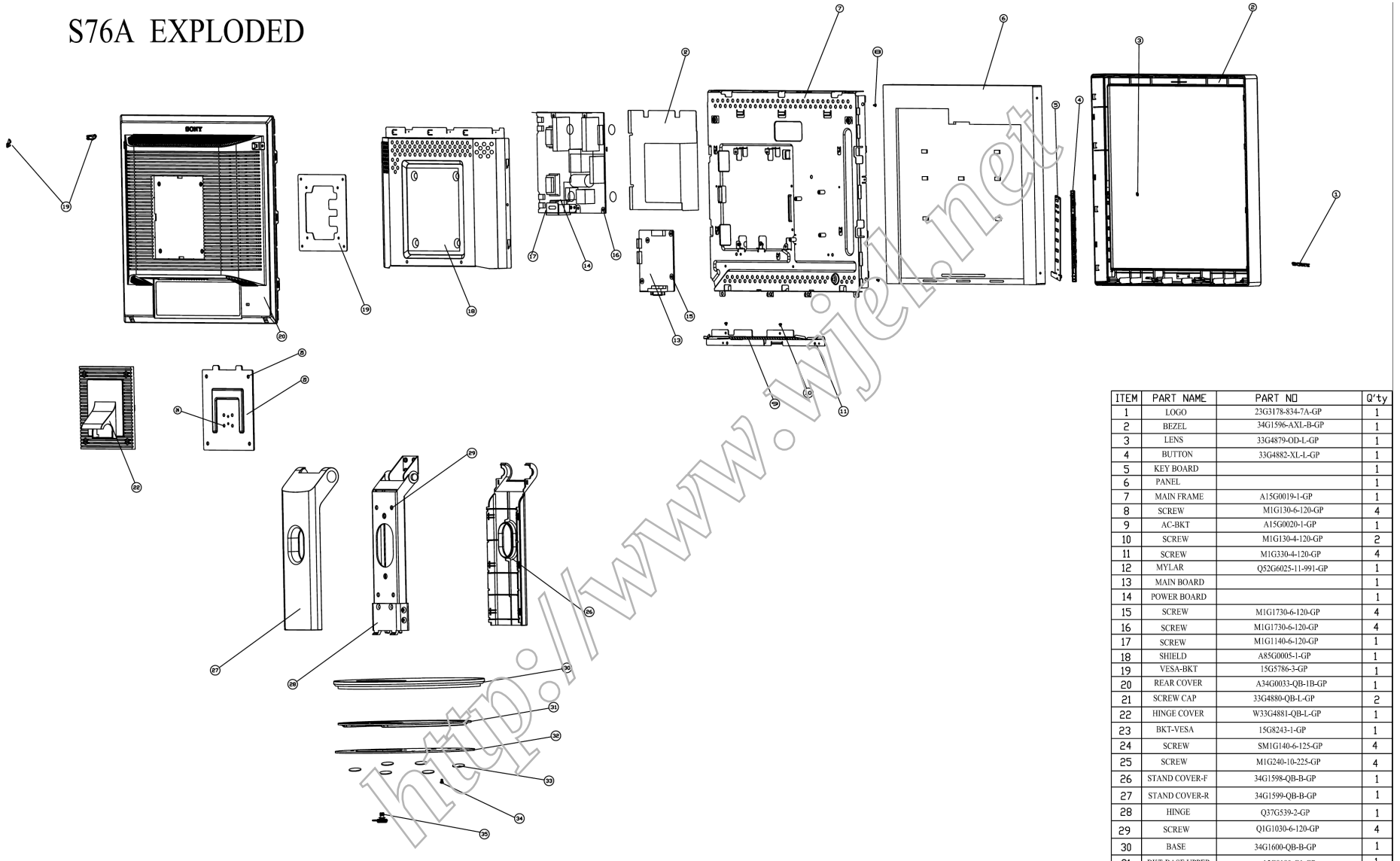
4.3 Monitor Exploded View



ITEM	PART NAME	PART NO	Q'ty
1	LOGO	23G3178-834-7A-GP	1
2	BEZEL	34G1596-AXL-B-GP	1
3	LENS	33G4879-OD-L-GP	1
4	BUTTON	33G4882-XL-L-GP	1
5	KEY BOARD		1
6	PANEL		1
7	MAIN FRAME	A15G0019-1-GP	1
8	SCREW	M1G130-6-120-GP	4
9	AC-BKT	A15G0020-1-GP	1
10	SCREW	M1G130-4-120-GP	2
11	SCREW	M1G330-4-120-GP	4
12	MYLAR	Q52G6025-11-991-GP	1
13	MAIN BOARD		1
14	POWER BOARD		1
15	SCREW	M1G1730-6-120-GP	4
16	SCREW	M1G1730-6-120-GP	4
17	SCREW	M1G1140-6-120-GP	1
18	SHIELD	A85G0005-1-GP	1
19	VESA-BKT	15G5786-3-GP	1
20	REAR COVER	A34G0033-QB-1B-GP	1
21	SCREW CAP	33G4880-QB-L-GP	2
22	HINGE COVER	W33G4881-QB-L-GP	1
23	BKT-VESA	15G8243-1-GP	1
24	SCREW	SM1G140-6-125-GP	4
25	SCREW	M1G240-10-225-GP	4
26	STAND COVER-F	34G1598-QB-B-GP	1
27	STAND COVER-R	34G1599-QB-B-GP	1
28	HINGE	Q37G539-2-GP	1
29	SCREW	Q1G1030-6-120-GP	4
30	BASE	34G1600-QB-B-GP	1
31	BKT-BASE UPPER	15G8180-G1-GP	1
32	BKT-BASE LOWER	A15G0021-1-GP	1
33	RUBBER-PAD	Q12G6600-7-GP	6
34	SCREW	Q1G140-6-120-GP	7
35	TRUMB SCREW	1G6017-1-GP	1

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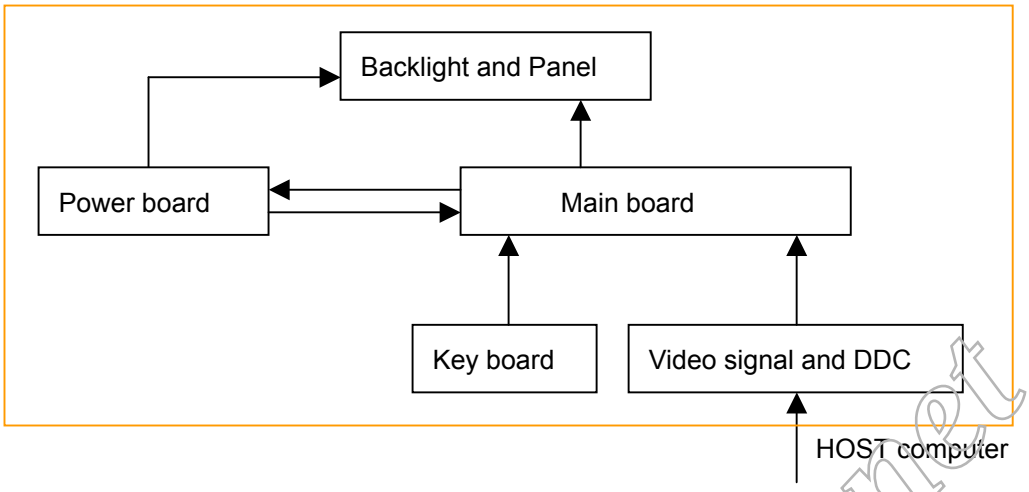
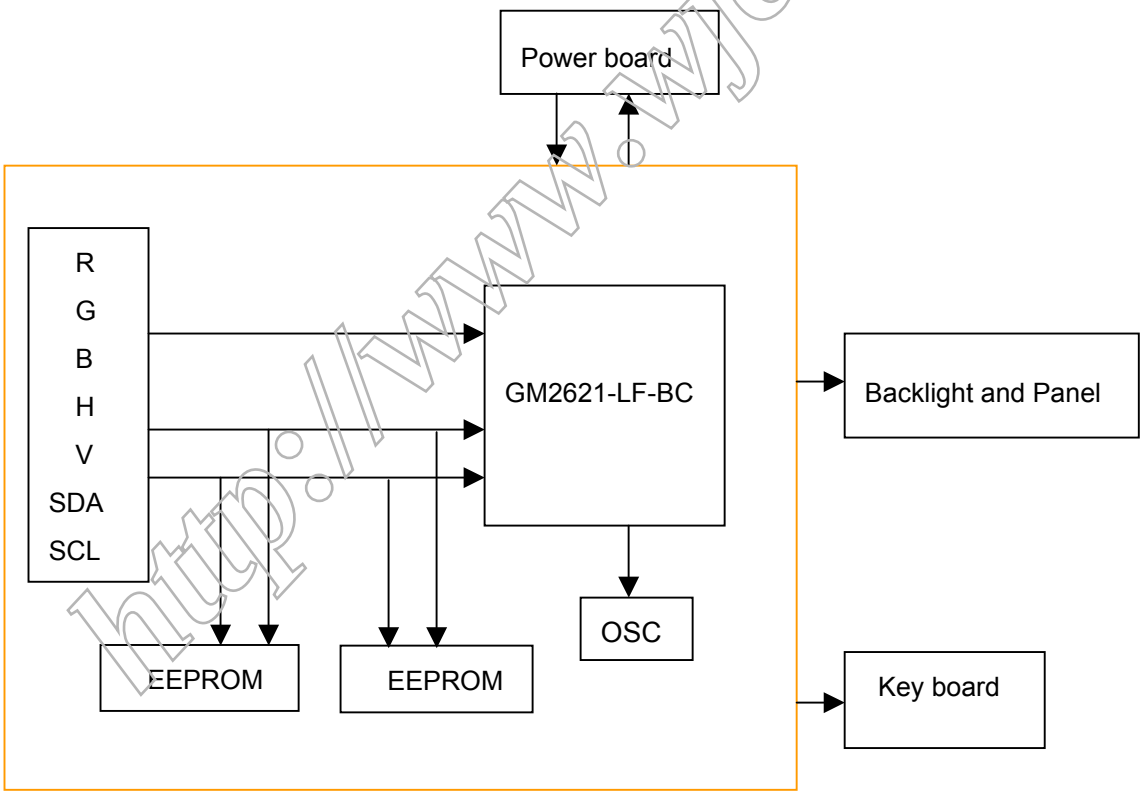
5. Circuit Block Diagram

The LCD Monitor contains a main board, an inverter/power board, and key board which house the flat panel control logic, brightness control logic and DDC.



5.1 Main board

The main board contains panel control logic, brightness control logic; DDC and DC convert DC circuit and so on.



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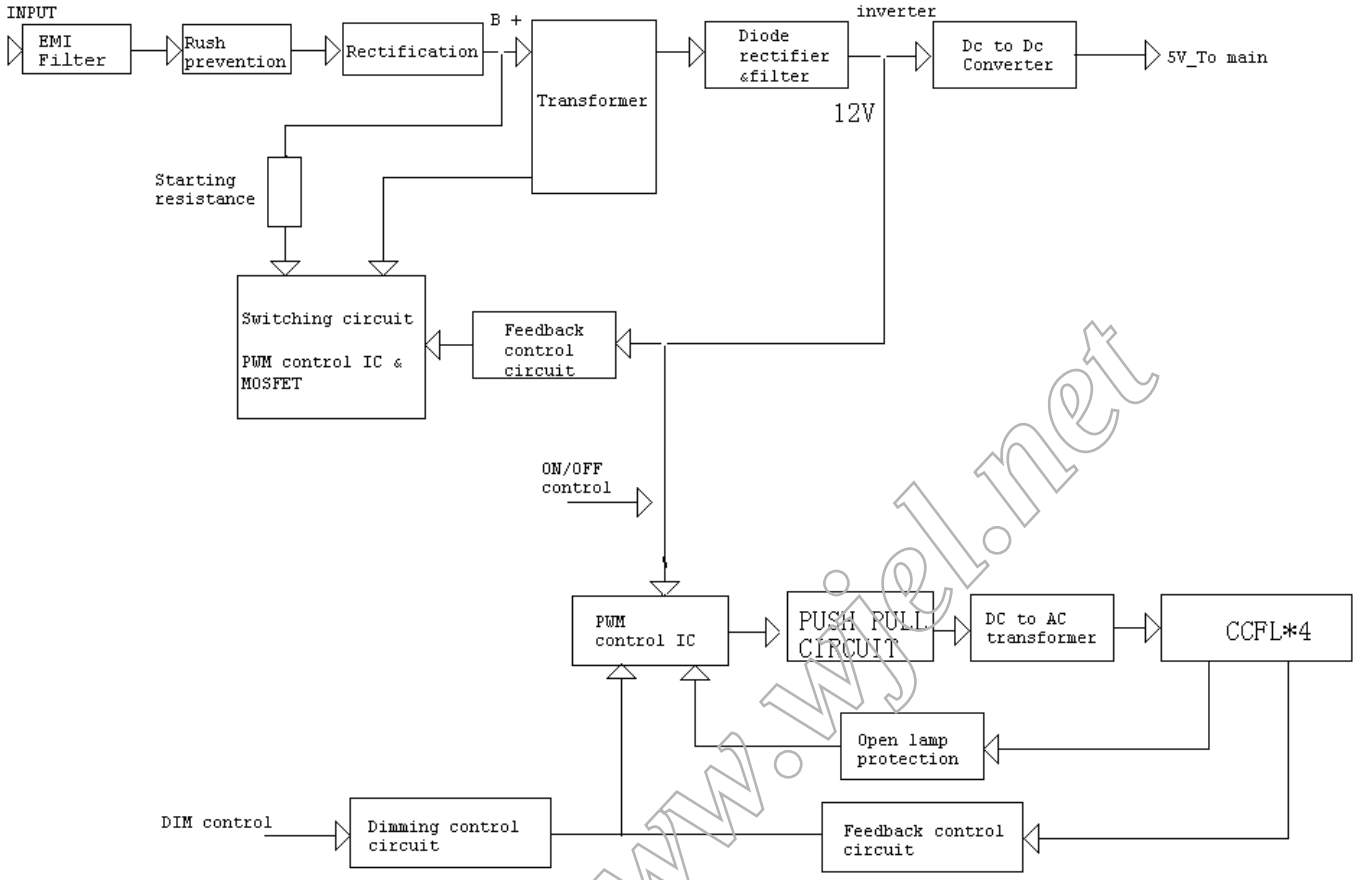
5.2 Power Board

Power board combines to adapter and inverter, this design has the merits in predigesting constructions, reducing cost and improving product's capability.



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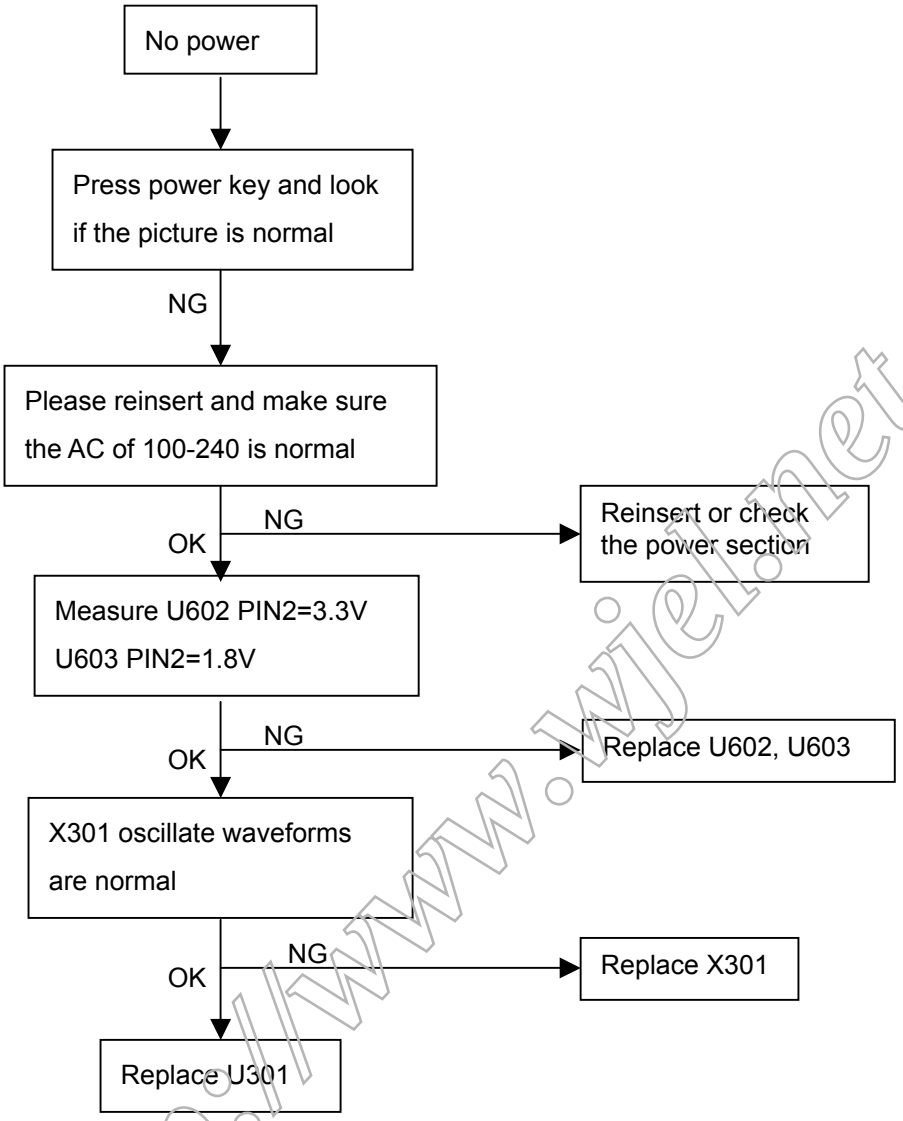
6. Trouble Shooting

6.1 Main Board

No power



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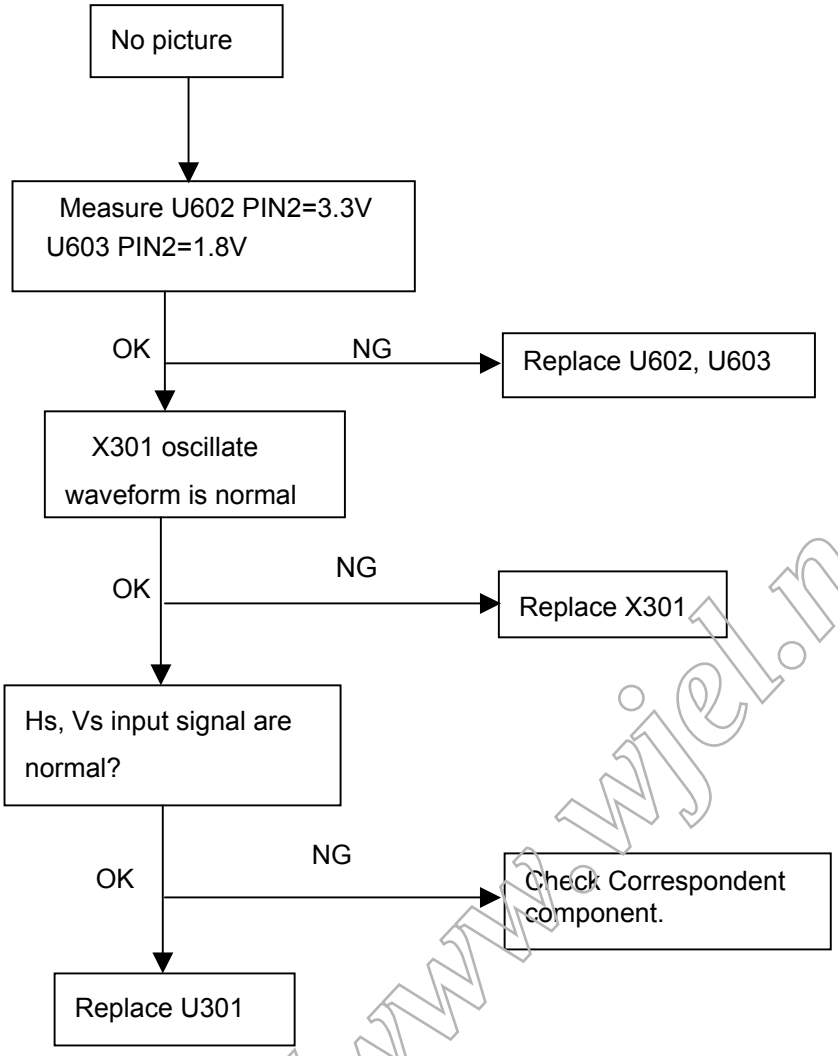
No picture (LED orange)



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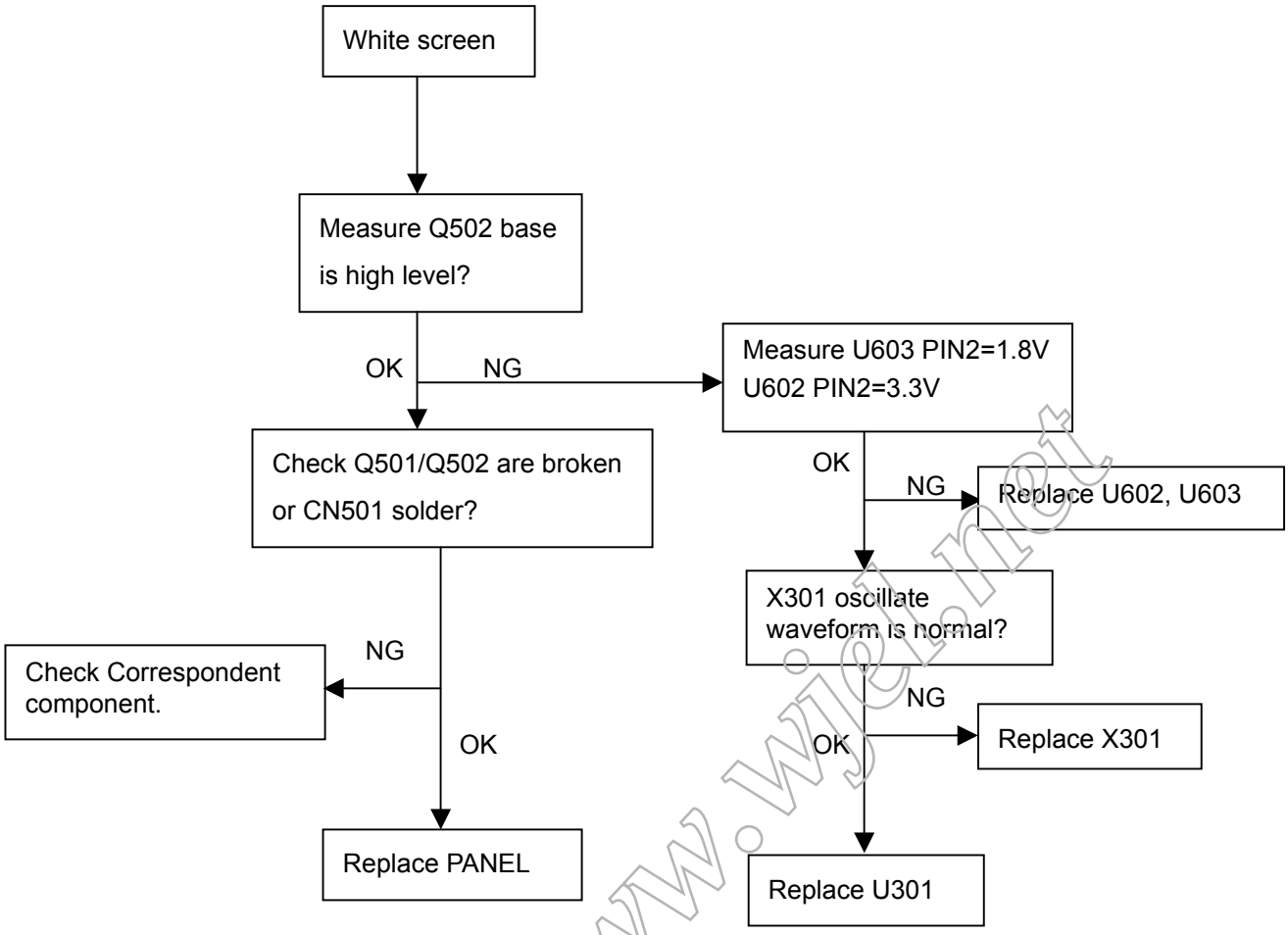
White screen



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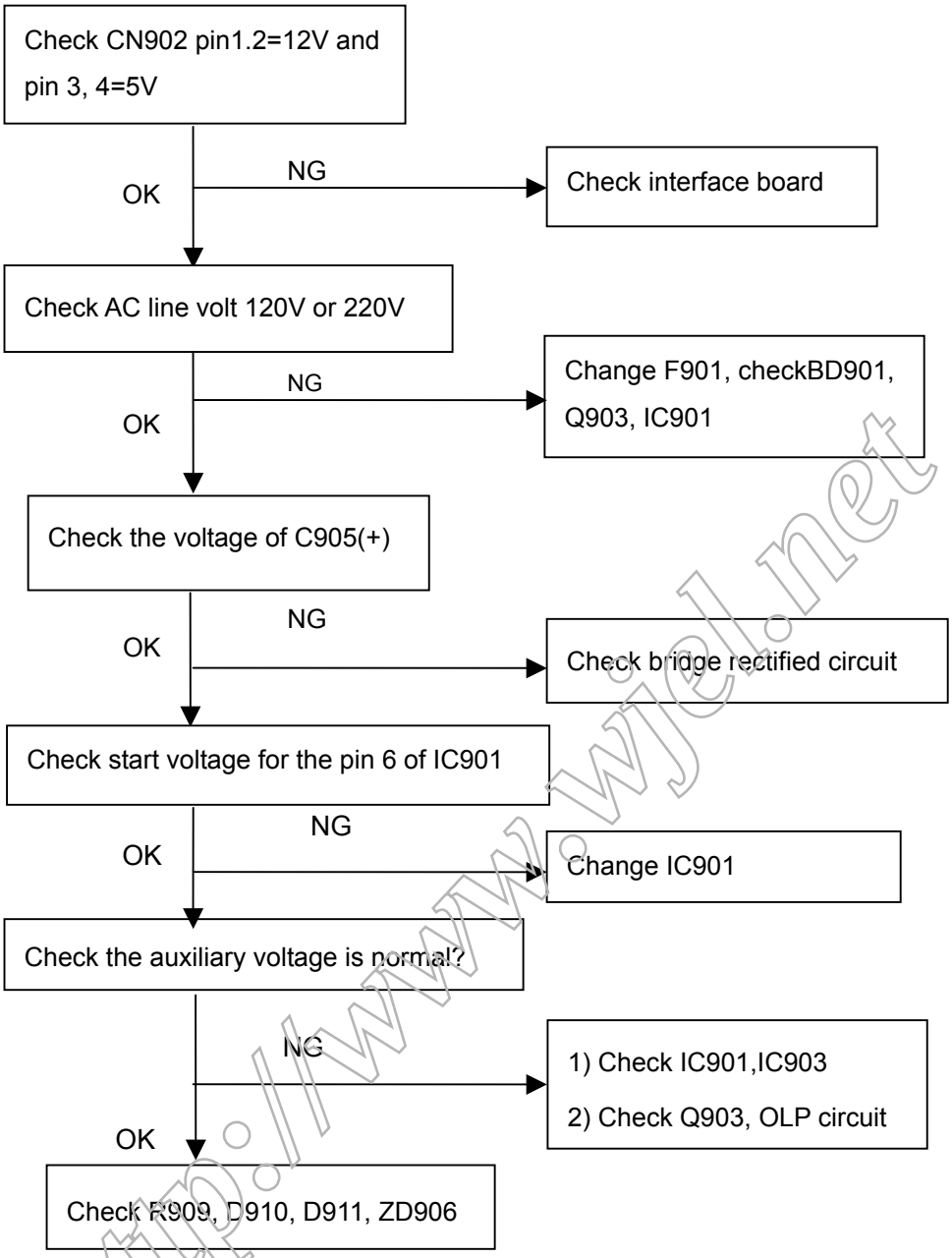
6.2 Power Board

No Power



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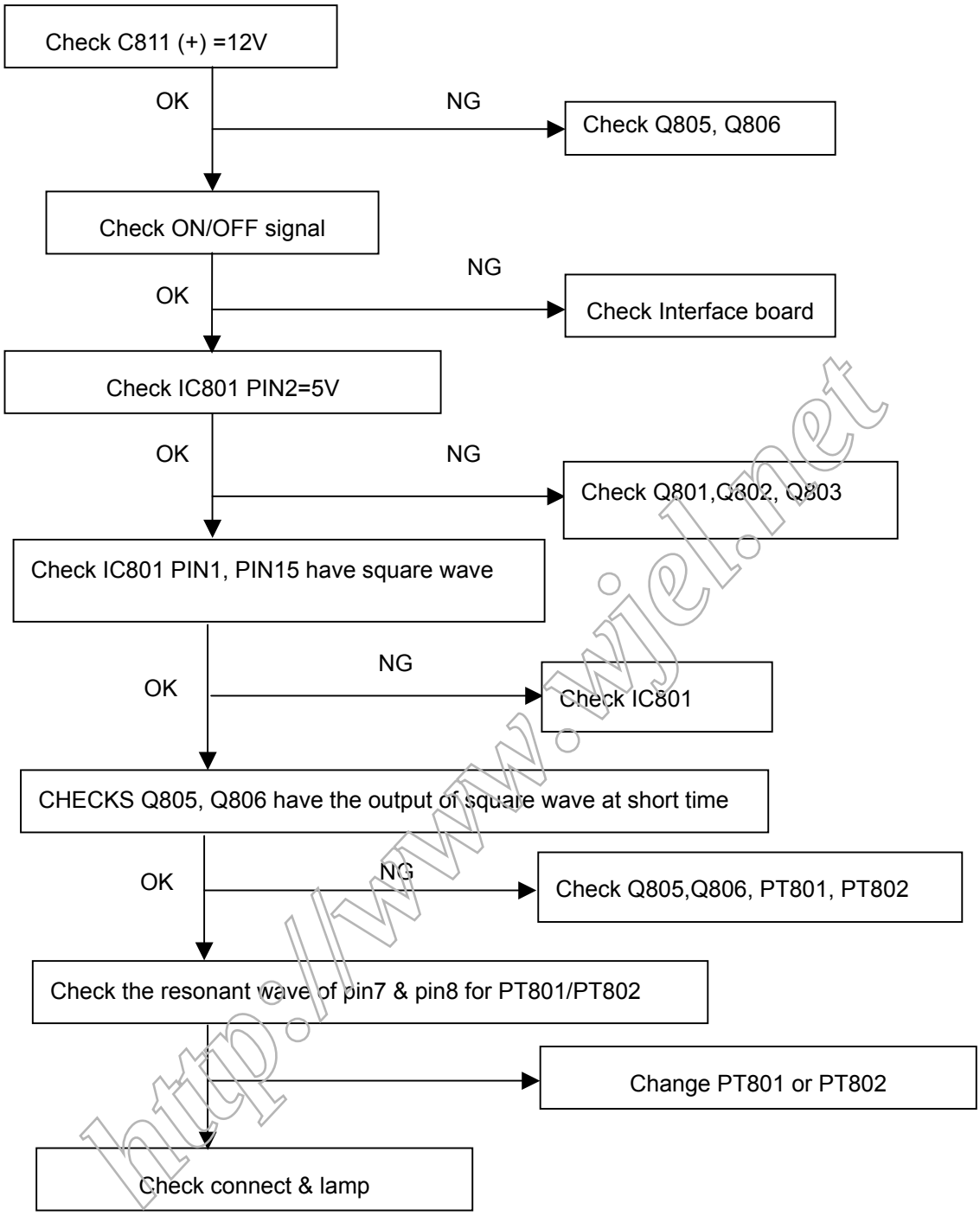
No Backlight



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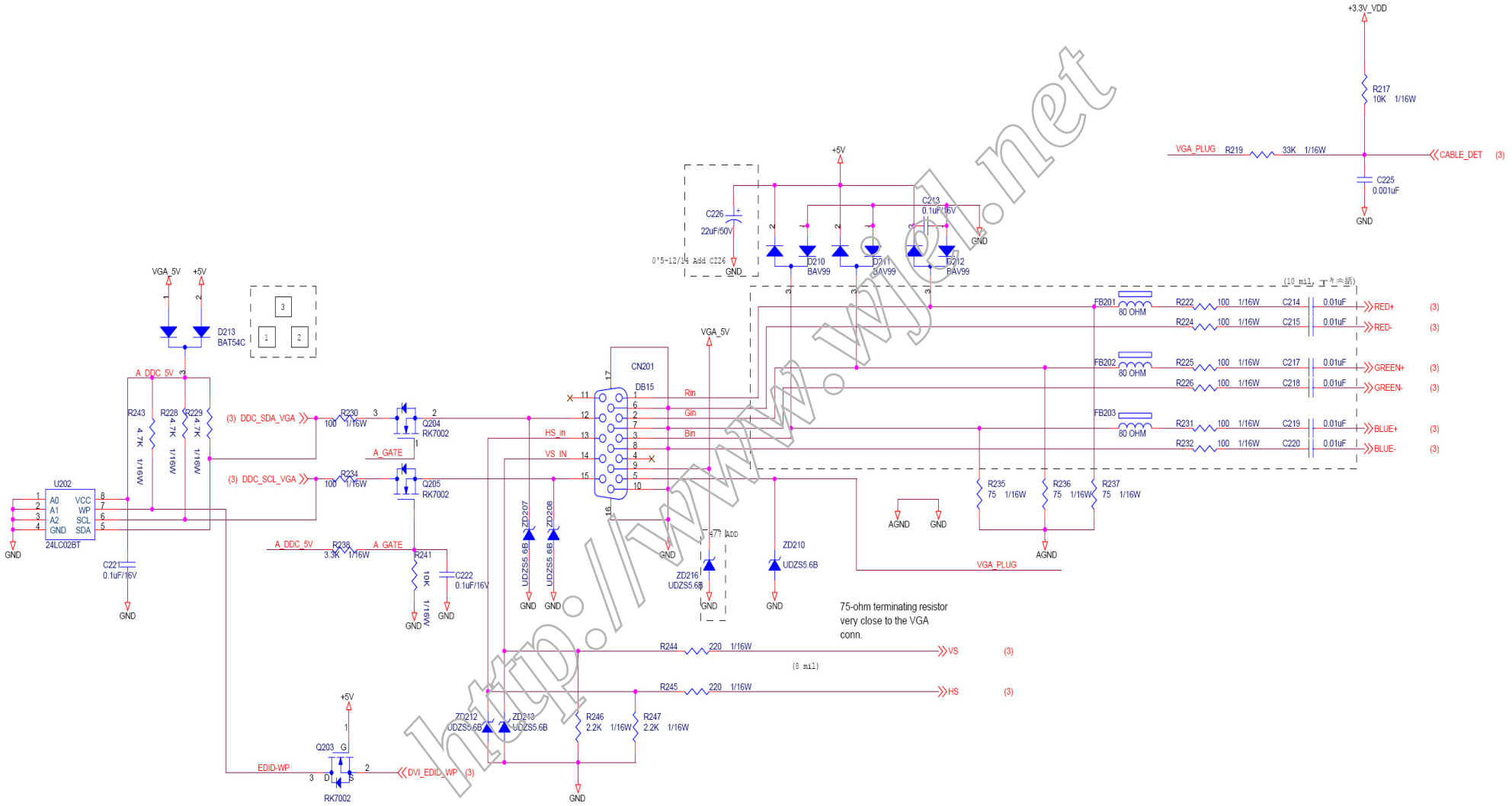
7. Schematic

7.1 Main Board



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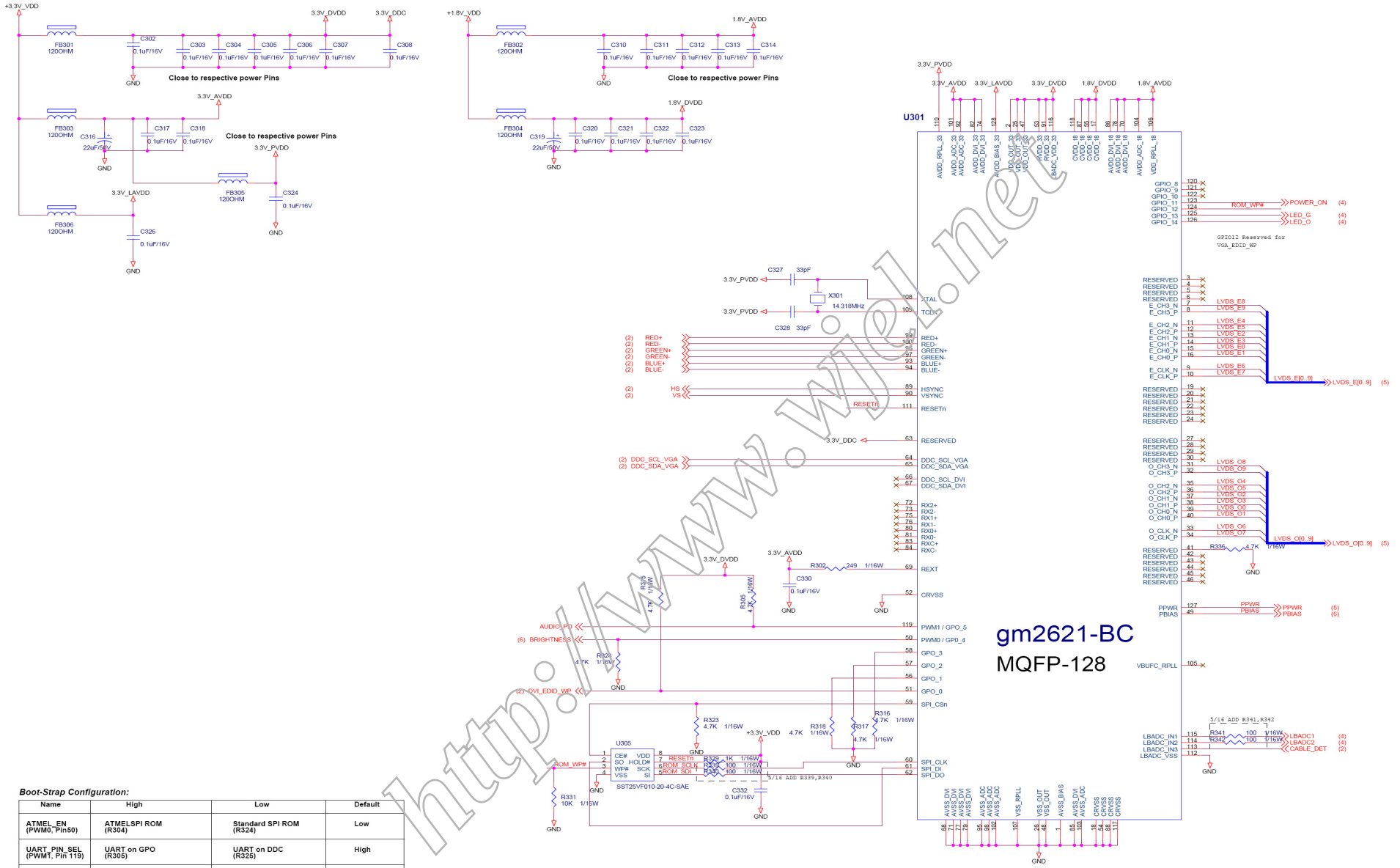

Boot-Strap Configuration:

Name	High	Low	Default
ATMEL_EN (PWM0, Pin50)	ATMELSPI ROM (R304)	Standard SPI ROM (R324)	Low
UART_PIN_SEL (PWM1, Pin 119)	UART on GPO (R305)	UART on DDC (R325)	High
V_EDID_ATMEL (SPI_CSn, Pin59)	ATMELSPI ROM (R303)	Standard SPI ROM (R323)	Low
GPO_0 (Pin51)	Ext. ROM JTAG Off (R315)		High

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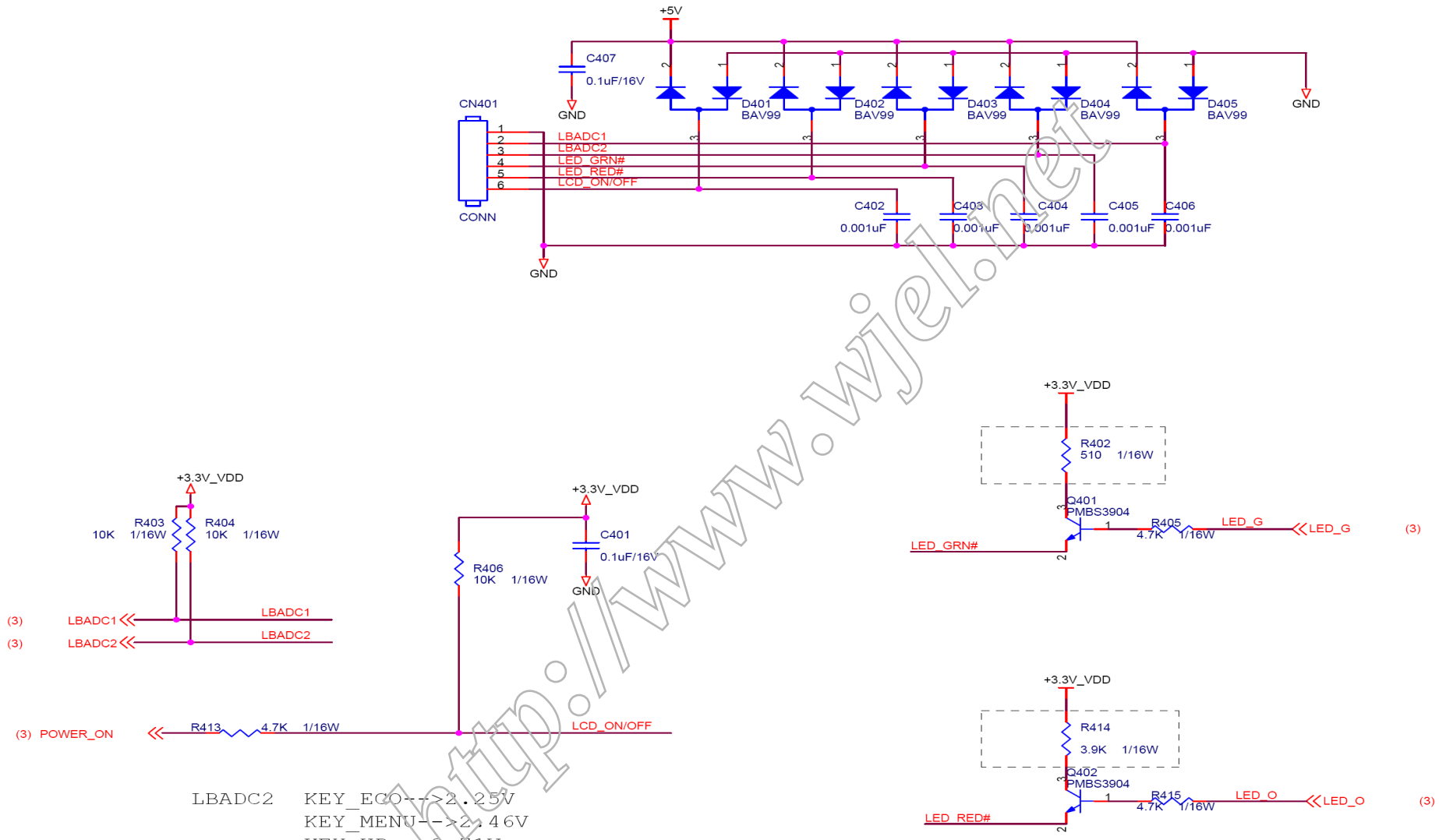

LBADC2 KEY_ECO-->2.25V
KEY_MENU-->2.46V
KEY_UP-->2.71V

LBADC1 KEY_OK-->2.25V
KEY_DOWN-->2.46V
LCD_ON/OFF -->2.71V
LCD_ON + KEY_OK -->1.98 V

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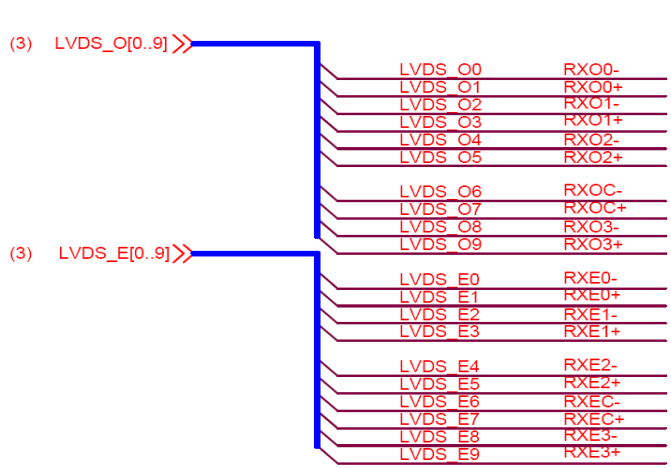

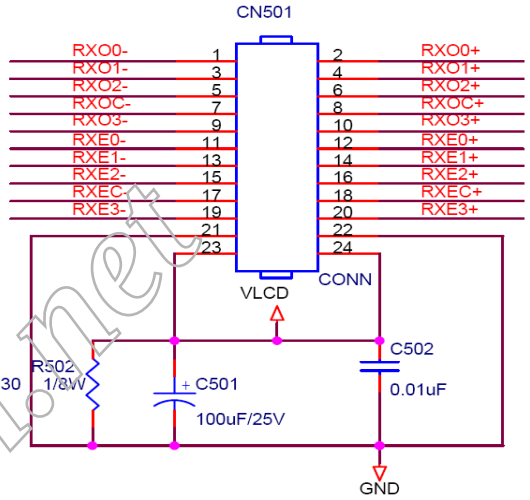

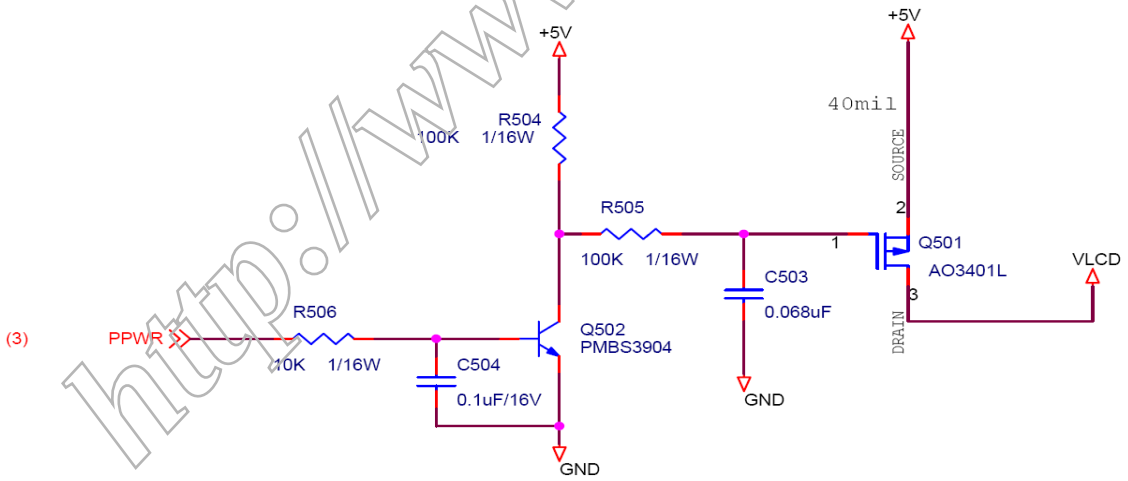

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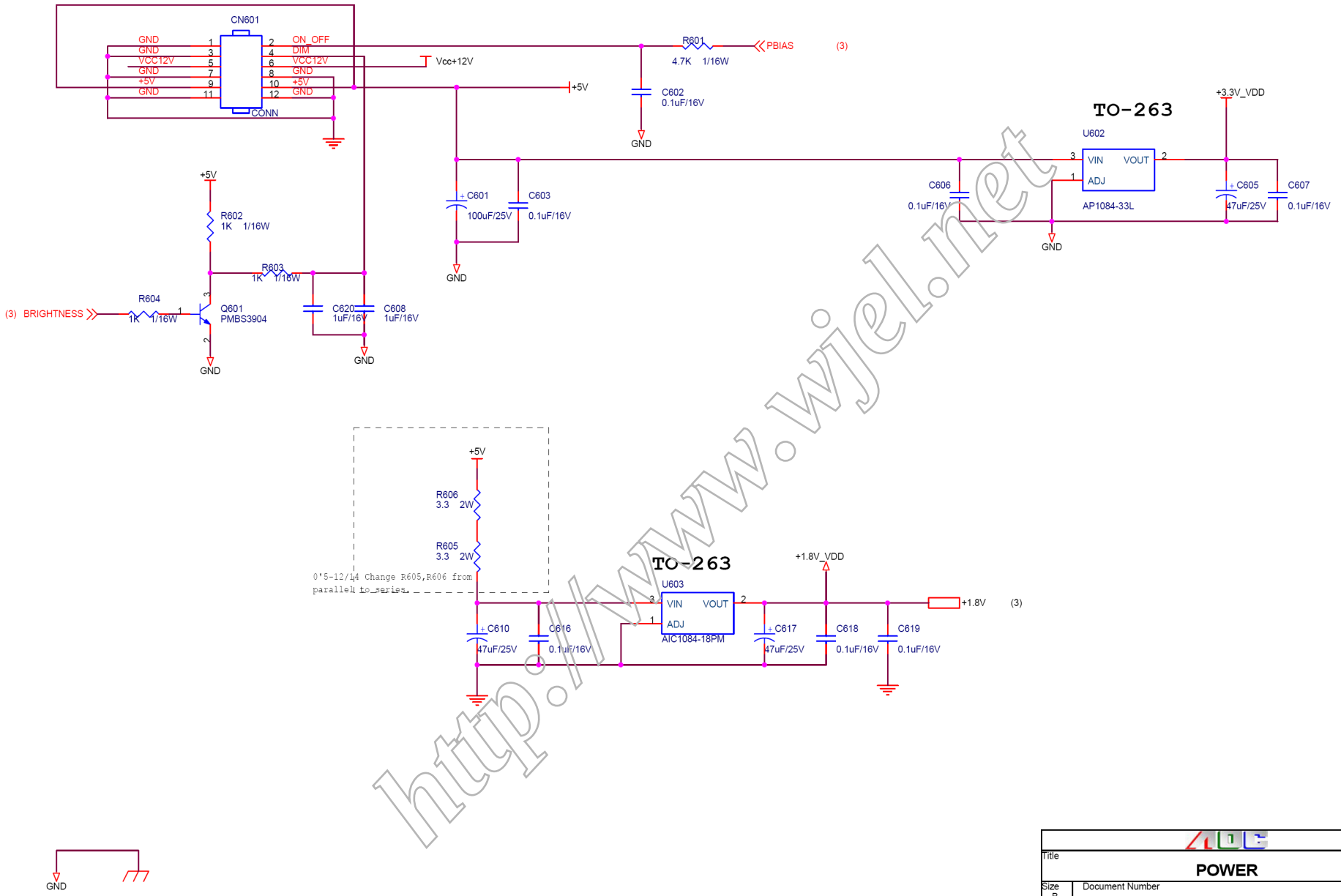

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Title	POWER	
Size B	Document Number	Rev A
Date: Wednesday, March 22, 2006	Sheet 6 of 7	

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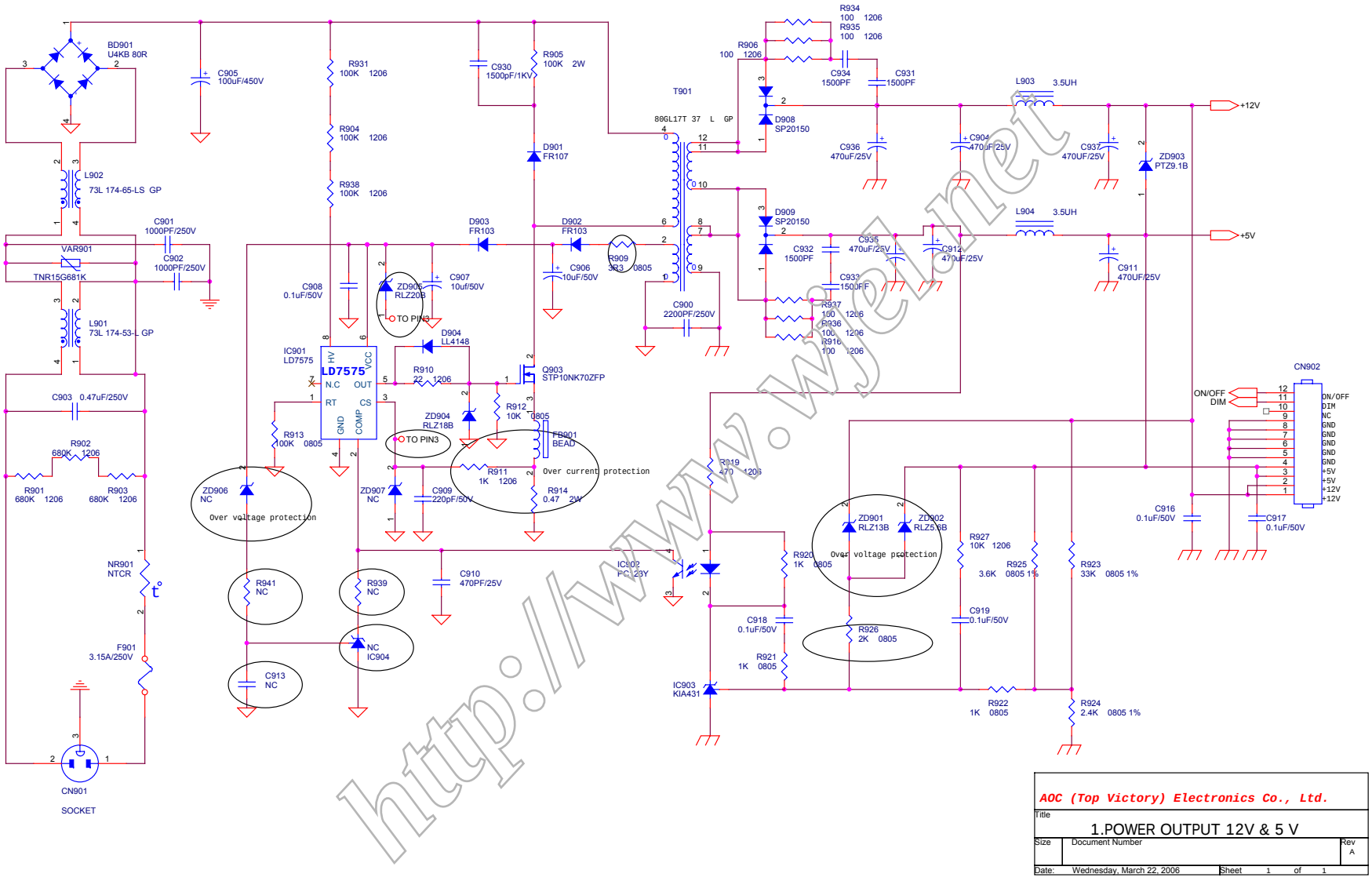
7.2 Power Board



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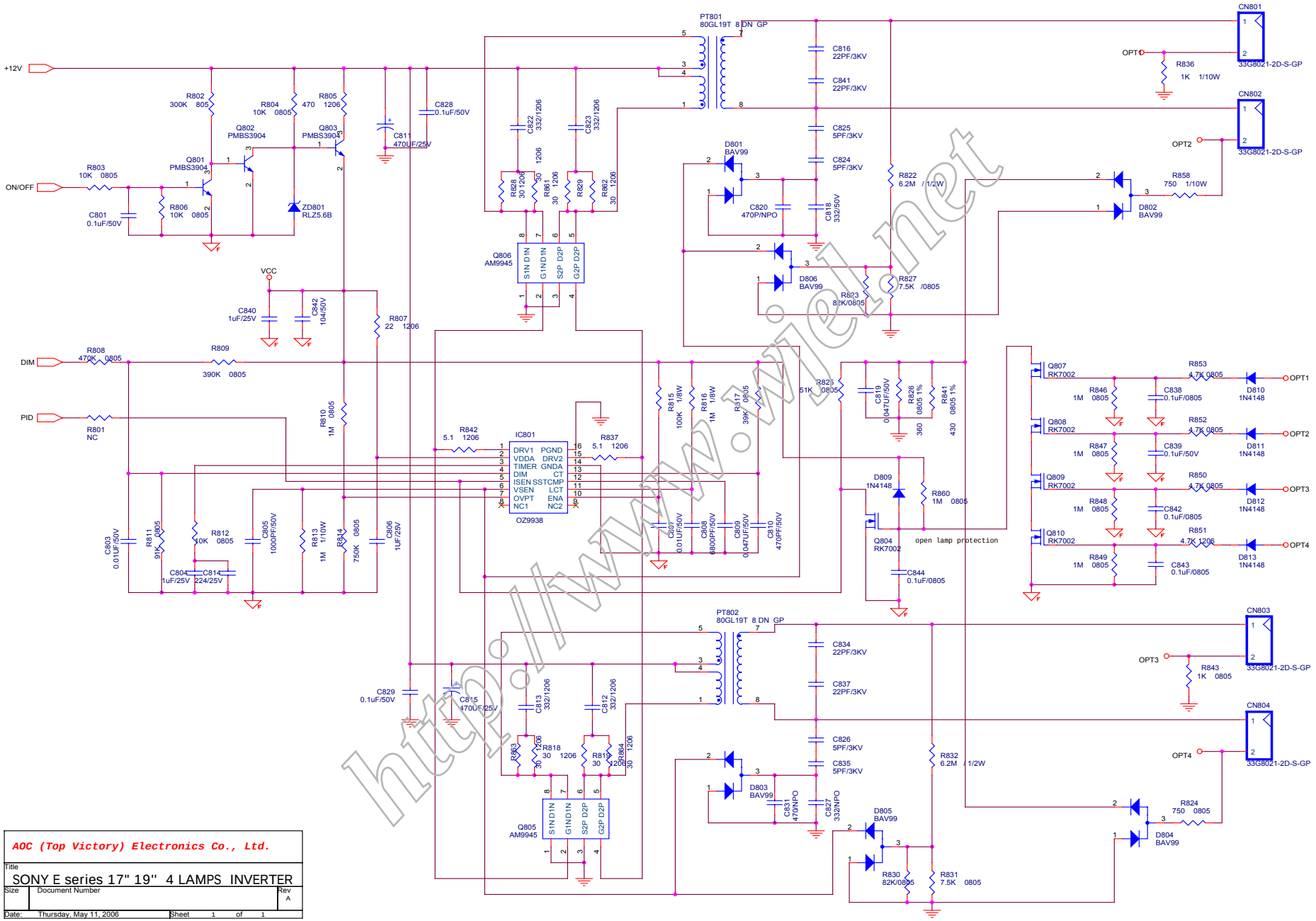

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AOC (Top Victory) Electronics Co., Ltd.		
Title: SONY E series 17" 19" 4 LAMPS INVERTER		
Size	Document Number	Rev A
Date: Thursday, May 11, 2006	Sheet 1 of 1	

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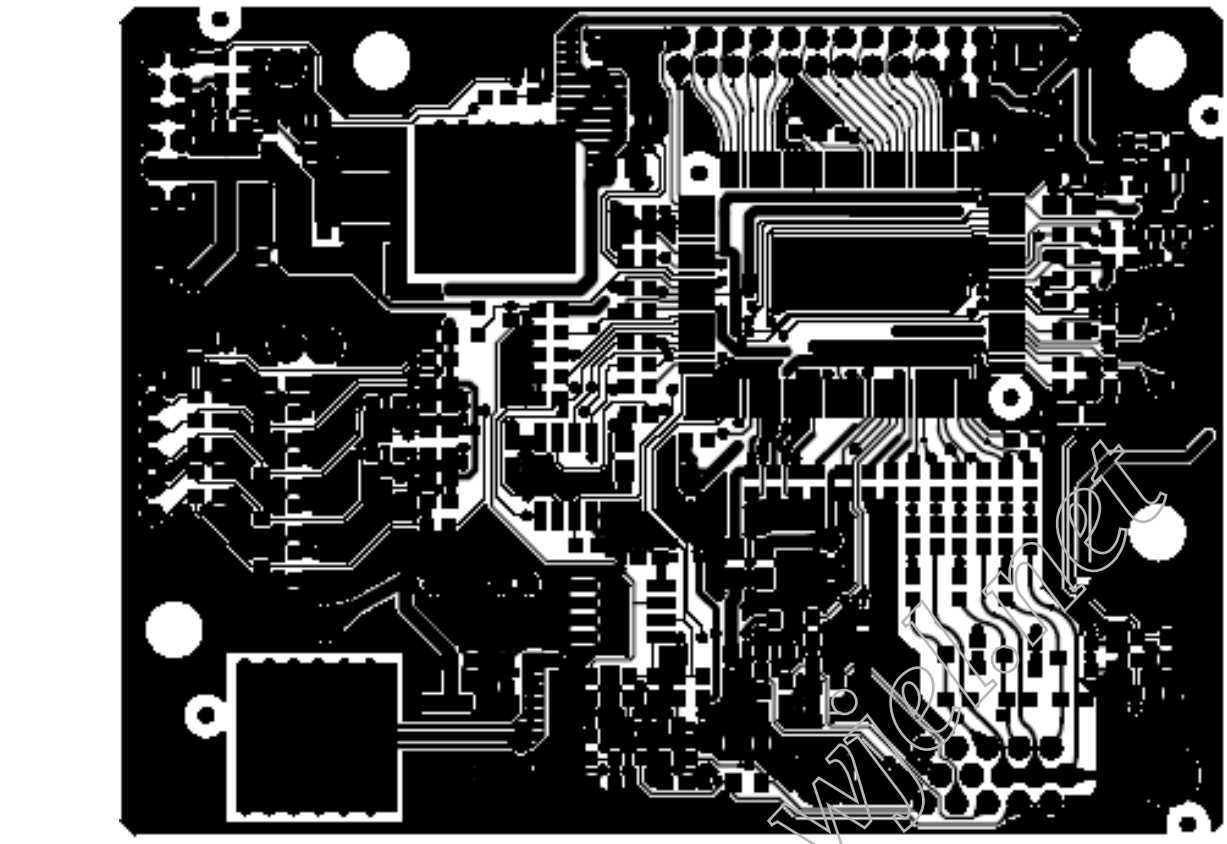
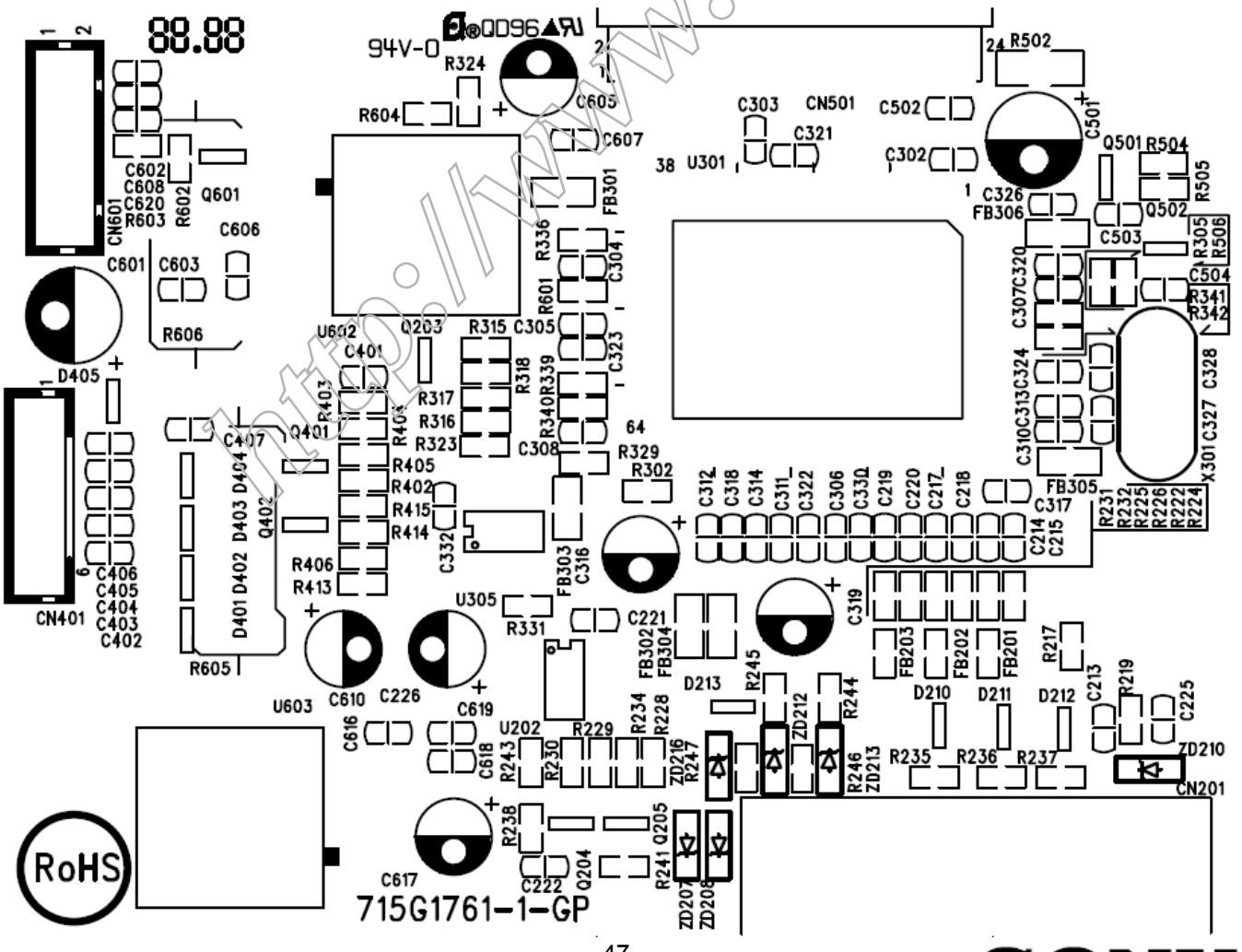
8. PCB Layout

8.1 Main Board





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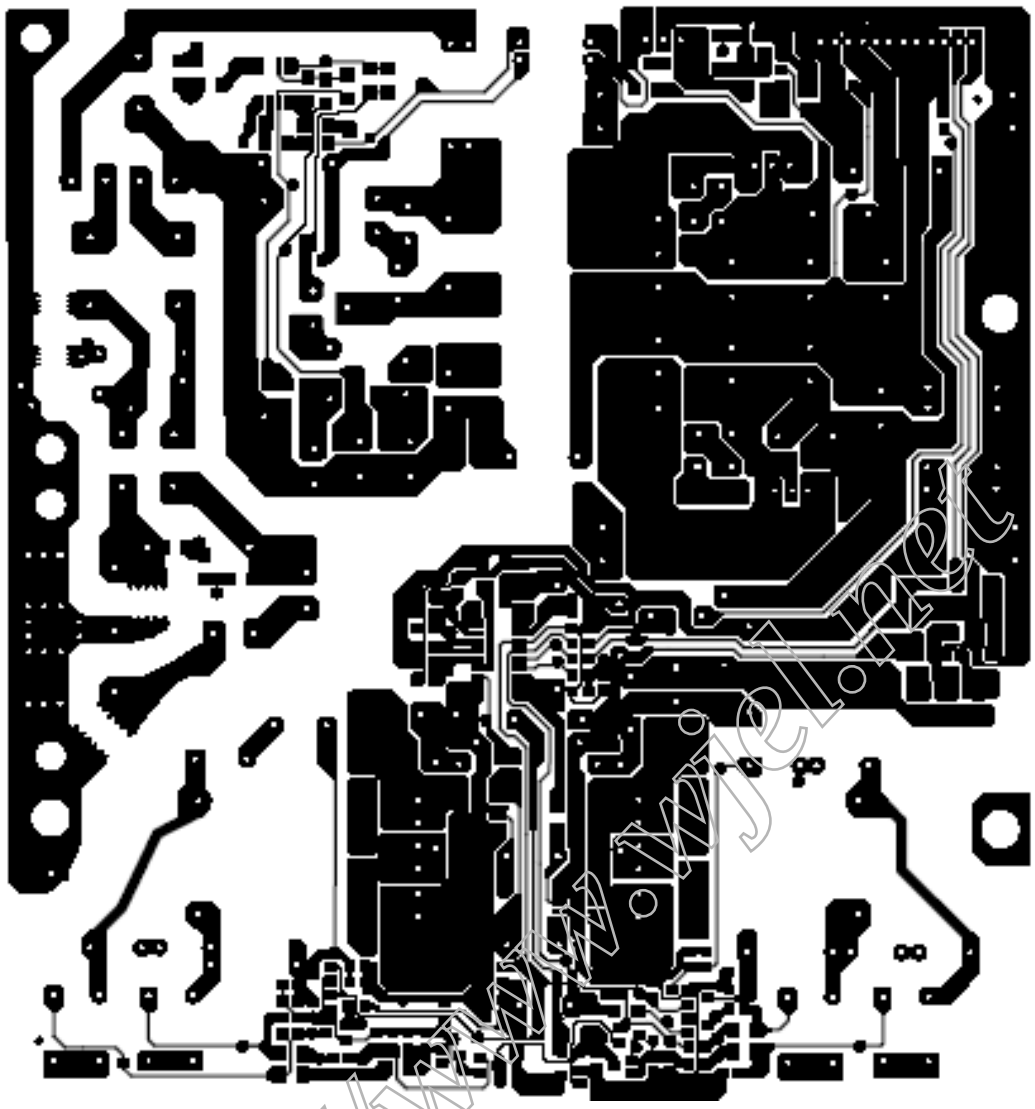
8.2 Power Board



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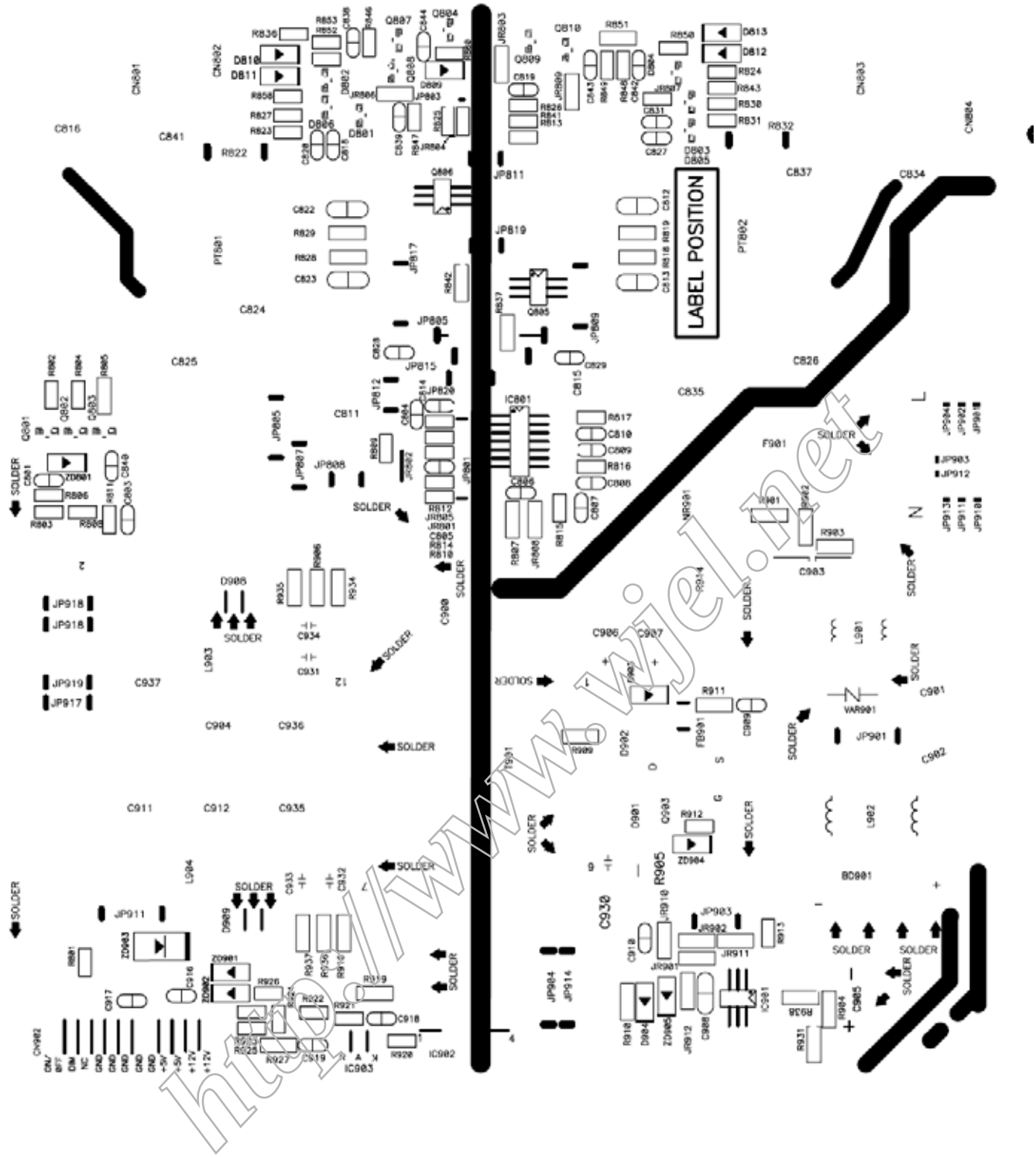

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9. EDID content

Analog

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
0:	00	FF	FF	FF	FF	FF	FF	00	4D	D9	00	C7	01	01	01	01
16:	14	10	01	03	0E	22	1B	78	EA	E0	E5	A4	56	45	9A	23
32:	15	50	54	AD	CF	00	81	80	81	40	01	01	01	01	01	01
48:	01	01	01	01	01	01	30	2A	00	98	51	00	2A	40	30	70
64:	13	00	52	0E	11	00	00	1E	00	00	00	FD	00	38	4B	1C
80:	51	0E	00	0A	20	20	20	20	20	20	00	00	00	FC	00	53
96:	44	4D	2D	53	37	36	41	0A	20	20	20	20	00	00	00	FF
112:	00	35	30	30	30	30	30	31	0A	20	20	20	20	20	00	31

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10. BOM List

T786KCDDKS4SNP

Location	Part No. for TPV	Description
	002G6008500 GP	SCREW
	011G6054 1 GP	LOCK WASHER
	011G6084 1 GP	CLAMP
	015G5786 1 GP	VESA BRACKET
	023G3178834 7A GP	LOGO
	033G4880 QB L GP	SCREW CAP
	040G 457834 9A GP	CARTON LABEL
	040G 58162435A GP	LABEL FOR PE BAG
	041G780083444A GP	INCERT
	044G9003 71 GP	CORNER PAPER
	044G9003210834 GP	CORNER PAPER
	045G 88607SY1 GP	EPE BAG FOR MONITOR
	045G 88609 24 GP	EPE BAG FOR BASE
	050G 600 2 GP	HANDLE1
	050G 600 3 GP	HANDLE2
	052G 1185 GP	MIDDLE TAPE FOR CARTON
	052G 1186 GP	SMALL TAPE
E089A	089G1738GAA 17 GP	SIGNAL CABLE
	089G402A18N IS GP	POWER CORD
	095G8018 30717 GP	LVDS CABLE
	0M1G 130 4120 GP	CPT PANEL/MAINFRAME
	0M1G 130 6120 GP	SCREW
	0M1G 240 12225 GP	SCREW
	0M1G 330 4 47 GP	SCREW
	0M1G 330 4120 GP	SCREW
	0M1G1140 6120 GP	SCREW
	0M1G1730 6120 GP	M3*6 SCREW
	0M1G1730 6120 GP	M3*6 SCREW
	0M1G1730 8128 GP	SCREW M3x8
	0Q1G 330 8120 GP	SCREW 3X8mm
	0Q1G 330 20 47 GP	SCREW T3*20
	705GQ7K0F34010	BEZEL ASS'Y
	705GQ7K0P34 07	STAND ASS'Y
	705GQ7K0S34 01	BASE ASS'Y

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	750GLB70A7Q11N00GP	PANEL LCD 17" EA07Q 272 SONY CTOC
	A15G0019 1 GP	MAIN FRAME-CPT
	A15G0020 1 GP	BKT CONNECTOR A
	A34G0033 QB 1B GP	REAR COVER
	A85G0005 1 GP	SHIELD
	CBPC783KCD2SP	CONVERSION BOARD
	PWPC1742CTS2P	POWER BOARD
	Q07G 8 1 12 GP	COMPOUND PALLET
	Q40G 17N83417A GP	RATING LABEL-BIG
	Q40G 45783429A GP	EPA LABEL
	Q41G780083474A GP	QSG
	Q44G6002136 87 GP	PAPER BOARD
	Q44G7015 1 GP	EPS(L)
	Q44G7015 2 GP	EPS(R)
	Q44G7015834 1A GP	CARTON
	Q52G6025 11991 GP	Mylar
	040G 45783413A GP	TCO 03
	045G 76 28V12 GP	PE BAG FOR MANUAL
	Q41G788083414A GP	Warranty card FOR U/C
	Q70G160083414A GP	CD MANUAL
	033G4879 OD L GP	LENS
	033G4882 XL L GP	BUTTON
	034G1596AXL B GP	BEZEL
	052G6025 12112 GP	MYLAR 35*10
	095G8014 6J536 GP	WIRE HARNESS
	KEPC783KS3P	KEY BOARD
	015G8243 1 GP	BKT VESA
	034G1598 QB B GP	STAND COVER-F
	034G1599 QB B GP	STAND COVER-R
	037G 539 1 GP	HINGE ASS'Y
	0Q1G1030 6120 GP	SCREW
	SM1G 140 6125 GP	SCREW
	W33G4881 QB L GP	HINGE COVER
	001G6017 1 GP	THUMB-SCREW
	015G8180 G1 GP	BKT -BASE-UPPER
	034G1600 QB B GP	BASE
	040G 45783425A GP	SCREW LABEL
	0Q1G 140 6120 GP	T4*8 SCREW

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	A15G0021 1 GP	BKT BASE LOWER
	Q12G6600 7 GP	BASE_PAD
CN401	033G3802 6 J GP	WAFER
CN601	033G8027 12 J GP	WAFER
CN501	033G8027 24 HJ GP	WAFER
	040G 457624 1B GP	CPU LABEL
	040G 45762420A GP	CBPC LABEL 25X6mm
C501	067G215L101 4N GP	KY25VB100M-L(6.3*11)
C601	067G215L101 4N GP	KY25VB100M-L(6.3*11)
C605	067G215L470 4N GP	KY25VB47M-L 5*11
C610	067G215L470 4N GP	KY25VB47M-L 5*11
C617	067G215L470 4N GP	KY25VB47M-L 5*11
C226	067G215Y2207NV GP	KY50VB22M-CC3
C319	067G215Y2207NV GP	KY50VB22M-CC3
C316	067G215Y2207NV GP	KY50VB22M-CC3
CN201	088G 35315FHSW GP	D-SUB
U301	090G6077 2 GP	HEAT SINK
X301	093G 22 53	CRYSTAL 14.318MHzHC-49US
	705G 981 61 S8	R605 ASS'Y
	705G 981 61 S9	R606 ASS'Y
	AIC783KCD2SP	MAIN BOARD
FOR CN901	015G8033 1 GP	BKT_AC INLET
CN804	033G8021 2D U GP	WAFER
CN803	033G8021 2D U GP	WAFER
CN802	033G8021 2D U GP	WAFER
CN801	033G8021 2D U GP	WAFER
	040G 45762420A GP	CBPC LABEL 25X6mm
	051G 6 4505 GP	RTV
IC902	056G 139 3A	PC123Y22FZOF
VAR901	061G 46 12 GP	TNR15G681K
NR901	061G 58080 WT GP	8 OHM NCTR
C903	063G 10747410S GP	0.47UF +-10% 250VAC
C816	065G 3J2206ET GP	22PF J. 3KV.SL
C834	065G 3J2206ET GP	22PF J. 3KV.SL
C837	065G 3J2206ET GP	22PF J. 3KV.SL
C841	065G 3J2206ET GP	22PF J. 3KV.SL
C824	065G 3J5096ET GP	5PF 5% SL 3KV
C825	065G 3J5096ET GP	5PF 5% SL 3KV

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C826	065G 3J5096ET GP	5PF 5% SL 3KV
C835	065G 3J5096ET GP	5PF 5% SL 3KV
C901	065G306M1022BM GP	Y1.CAP.001UF 250VAC MURATA
C902	065G306M1022BM GP	Y1.CAP.001UF 250VAC MURATA
C900	065G306M2222BM GP	2200PF +-20% 250VAC Y1
C905	067G215S10115N GP	EC CAP 450V/100
C937	067G215V471 4N GP	KY25VB470M-CC3 10*16
C936	067G215V471 4N GP	KY25VB470M-CC3 10*16
C935	067G215V471 4N GP	KY25VB470M-CC3 10*16
C912	067G215V471 4N GP	KY25VB470M-CC3 10*16
C911	067G215V471 4N GP	KY25VB470M-CC3 10*16
C904	067G215V471 4N GP	KY25VB470M-CC3 10*16
C815	067G215V471 4N GP	KY25VB470M-CC3 10*16
C811	067G215V471 4N GP	KY25VB470M-CC3 10*16
FB901	071G 55 29 GP	FERRITE BEAD
L902	073G 174 65 LS GP	LINE FILTER 7mH LISHIN
L904	073G 253 91 LS GP	CHOKE BY LI SHIN
L903	073G 253 91 LS GP	CHOKE BY LI SHIN
L901	073L 174 53 LG GP	CHOKE
T901	080GL17T 37 L GP	XFMR FOR POWER LITAI
PT802	080GL19T 8 DN GP	TRANSFORMER
PT801	080GL19T 8 DN GP	TRANSFORMER
F901	084G 55 7 GP	FUSE 3.15A 250V
BD901	093G 50460 16	U4KB80R
CN902	095G801412J545 GP	WIRE HARNESS
	0M1G1730 6125 GP	SCREW
	705G 780 87 27	CN901 ASS'Y
	705G 980 57S12	Q903 ASS'Y
	705G 980 61S01	R905 ASS'Y
	705G 980 61S02	R914 ASS'Y
	705G 980 93S12	D908 ASS'Y
	705G 980 93S13	D901 ASS'Y
	705G 980 93S14	D902 ASS'Y
	705G 980 93S15	D909 ASS'Y
	P1742CTS2SMTP	POWER BOARD FOR SMT
	AIK783KS3SMTP	KEY BOARD FOR SMT
R605	061G153M339 59 GP	RST CHIPR 3.3OHM +-5% 3WS
	096G 29 1 GP	SHRINK TUBE UL/CSA

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R606	061G153M339 59 GP	RST CHIPR 3.3OHM +-5% 3WS
	096G 29 1 GP	SHRINK TUBE UL/CSA
U301	056G 562101	GM2621-LF-BC
U602	056G 563 21	AP1084K33LA
U603	056G 563 34	AIC 1084-18PM TO-263
U305	056G1133 81	SST25LF020A-33-4C-SAE
U202	056G113334A	24LC02B/SNG SOIC-8PIN
Q401	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q402	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q502	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q601	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q203	057G 759 2	RK7002
Q204	057G 759 2	RK7002
Q205	057G 759 2	RK7002
Q501	057G 763 1	A03401 SOT23 BY AOS(A1)
R241	061L0603100 2F GP	CHIPR 10K OHM +-1% 1/10W
R340	061L0603101 GP	CHIPR 100 OHM +-5% 1/10W
R339	061L0603101 GP	CHIPR 100 OHM +-5% 1/10W
R234	061L0603101 GP	CHIPR 100 OHM +-5% 1/10W
R232	061L0603101 GP	CHIPR 100 OHM +-5% 1/10W
R231	061L0603101 GP	CHIPR 100 OHM +-5% 1/10W
R230	061L0603101 GP	CHIPR 100 OHM +-5% 1/10W
R226	061L0603101 GP	CHIPR 100 OHM +-5% 1/10W
R225	061L0603101 GP	CHIPR 100 OHM +-5% 1/10W
R224	061L0603101 GP	CHIPR 100 OHM +-5% 1/10W
R222	061L0603101 GP	CHIPR 100 OHM +-5% 1/10W
R342	061L0603101 GP	CHIPR 100 OHM +-5% 1/10W
R341	061L0603101 GP	CHIPR 100 OHM +-5% 1/10W
R604	061L0603102 GP	CHIPR 1K OHM +-5% 1/10W
R603	061L0603102 GP	CHIPR 1K OHM +-5% 1/10W
R602	061L0603102 GP	CHIPR 1K OHM +-5% 1/10W
R329	061L0603102 GP	CHIPR 1K OHM +-5% 1/10W
R506	061L0603103 GP	CHIPR 10K OHM +-5% 1/10W
R406	061L0603103 GP	CHIPR 10K OHM +-5% 1/10W
R404	061L0603103 GP	CHIPR 10K OHM +-5% 1/10W
R403	061L0603103 GP	CHIPR 10K OHM +-5% 1/10W
R331	061L0603103 GP	CHIPR 10K OHM +-5% 1/10W
R217	061L0603103 GP	CHIPR 10K OHM +-5% 1/10W

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R505	061L0603104 GP	CHIPR 100K OHM +-5% 1/10W
R504	061L0603104 GP	CHIPR 100K OHM +-5% 1/10W
R244	061L0603221 GP	CHIP 220 OHM 1/16W
R245	061L0603221 GP	CHIP 220 OHM 1/16W
R246	061L0603222 GP	CHIPR 2.2K OHM+-5% 1/10W
R247	061L0603222 GP	CHIPR 2.2K OHM+-5% 1/10W
R302	061L0603249 0F GP	CHIP 249 OHM 1/16W
R238	061L0603330 1F GP	CHIPR 3.3K OHM +-1% 1/10W
R219	061L0603333 GP	CHIP 33KOHM 1/16W
R414	061L0603392 GP	CHIP 3.9K OHM 1/10W
R228	061L0603472 GP	CHIPR 4.7K OHM +-5% 1/10W
R229	061L0603472 GP	CHIPR 4.7K OHM +-5% 1/10W
R243	061L0603472 GP	CHIPR 4.7K OHM +-5% 1/10W
R315	061L0603472 GP	CHIPR 4.7K OHM +-5% 1/10W
R317	061L0603472 GP	CHIPR 4.7K OHM +-5% 1/10W
R316	061L0603472 GP	CHIPR 4.7K OHM +-5% 1/10W
R305	061L0603472 GP	CHIPR 4.7K OHM +-5% 1/10W
R601	061L0603472 GP	CHIPR 4.7K OHM +-5% 1/10W
R415	061L0603472 GP	CHIPR 4.7K OHM +-5% 1/10W
R413	061L0603472 GP	CHIPR 4.7K OHM +-5% 1/10W
R405	061L0603472 GP	CHIPR 4.7K OHM +-5% 1/10W
R336	061L0603472 GP	CHIPR 4.7K OHM +-5% 1/10W
R324	061L0603472 GP	CHIPR 4.7K OHM +-5% 1/10W
R323	061L0603472 GP	CHIPR 4.7K OHM +-5% 1/10W
R318	061L0603472 GP	CHIPR 4.7K OHM +-5% 1/10W
R402	061L0603511 GP	CHIPR 510 OHM+-5% 1/10W
R235	061L0603750 GP	CHIPR 75 OHM+-5% 1/10W
R236	061L0603750 GP	CHIPR 75 OHM+-5% 1/10W
R237	061L0603750 GP	CHIPR 75 OHM+-5% 1/10W
R502	061L1206331 GP	CHIP 330 OHM 5%
C406	065G0603102 31 GP	CHIP CAP 0603 1000PF J 50V NPO
C405	065G0603102 31 GP	CHIP CAP 0603 1000PF J 50V NPO
C404	065G0603102 31 GP	CHIP CAP 0603 1000PF J 50V NPO
C403	065G0603102 31 GP	CHIP CAP 0603 1000PF J 50V NPO
C402	065G0603102 31 GP	CHIP CAP 0603 1000PF J 50V NPO
C225	065G0603102 32 GP	1000PF +-10% 50V X7R
C502	065G0603103 32 GP	CHIP 0.01UF 50V X7R
C220	065G0603103 32 GP	CHIP 0.01UF 50V X7R

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C219	065G0603103 32 GP	CHIP 0.01UF 50V X7R
C218	065G0603103 32 GP	CHIP 0.01UF 50V X7R
C217	065G0603103 32 GP	CHIP 0.01UF 50V X7R
C215	065G0603103 32 GP	CHIP 0.01UF 50V X7R
C214	065G0603103 32 GP	CHIP 0.01UF 50V X7R
C602	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C603	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C323	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C322	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C321	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C320	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C318	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C317	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C314	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C313	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C312	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C311	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C324	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C606	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C607	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C616	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C618	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C619	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C326	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C330	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C332	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C401	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C407	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C504	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C310	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C213	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C221	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C222	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C302	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C303	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C304	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C305	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C306	065G0603104 12 GP	CHIP 0.1UF 16V X7R

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C307	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C308	065G0603104 12 GP	CHIP 0.1UF 16V X7R
C608	065G0603105 12 GP	CHIP CAP 0603 1UF K 16V X7R
C620	065G0603105 12 GP	CHIP CAP 0603 1UF K 16V X7R
C327	065G0603330 31 GP	33PF+-5% 50V NPO
C328	065G0603330 31 GP	33PF+-5% 50V NPO
C503	065G0603683 32 GP	CHIP 0.068UF 50V X7R
FB301	071G 56K121 M GP	120 OHM 6A
FB302	071G 56K121 M GP	120 OHM 6A
FB303	071G 56K121 M GP	120 OHM 6A
FB304	071G 56K121 M GP	120 OHM 6A
FB305	071G 56K121 M GP	120 OHM 6A
FB306	071G 56K121 M GP	120 OHM 6A
FB201	071G 59C800 GP	CHIP BEAD
FB202	071G 59C800 GP	CHIP BEAD
FB203	071G 59C800 GP	CHIP BEAD
D213	093G 60230	BAT54C(L43)
D210	093G 64 33	DIO SIG SM BAV99 (PHSE)R
D211	093G 64 33	DIO SIG SM BAV99 (PHSE)R
D212	093G 64 33	DIO SIG SM BAV99 (PHSE)R
D401	093G 64 33	DIO SIG SM BAV99 (PHSE)R
D402	093G 64 33	DIO SIG SM BAV99 (PHSE)R
D403	093G 64 33	DIO SIG SM BAV99 (PHSE)R
D404	093G 64 33	DIO SIG SM BAV99 (PHSE)R
D405	093G 64 33	DIO SIG SM BAV99 (PHSE)R
ZD207	093G 39S 34 T	UDZS5.6B
ZD208	093G 39S 34 T	UDZS5.6B
ZD210	093G 39S 34 T	UDZS5.6B
ZD212	093G 39S 34 T	UDZS5.6B
ZD213	093G 39S 34 T	UDZS5.6B
ZD216	093G 39S 34 T	UDZS5.6B
	715G1761 1 GP	MAIN BOARD PCB
	052G6025 12113 GP	MYLAR
CN901	087G 501 27 RF GP	AC SOCKET
Q903	057G 667 21	STP10NK70ZFP
	090G6064 1 GP	HEAT SINK
	AM1G1730 8120 GP	SCREW
R905	061G152M10458F GP	100K OHM 5% 2W

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	096G 29 6 GP	SHRINK TUBE UL/CSA
R914	061G152M47858F GP	RST MOFR 0.47OHM +-5% 2WS
	096G 29 6 GP	SHRINK TUBE UL/CSA
	090G6241 2 GP	HEAT SINK
D908	093G 60252	SP20150
	AM1G1730 8120 GP	SCREW
D901	093G 6026T52T	RECTIFIER DIODE FR107
	096G 29 1 GP	SHRINK TUBE UL/CSA
D902	093G 6038T52T	FR103
	096G 29 1 GP	SHRINK TUBE UL/CSA
	090G6241 2 GP	HEAT SINK
D909	093G 60252	SP20150
	AM1G1730 8120 GP	SCREW
IC901	056G 379 61	LD7575PS SOP-8
IC801	056G 608 10	0Z9938
Q801	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q802	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q803	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q804	057G 759 2	RK7002
Q807	057G 759 2	RK7002
Q808	057G 759 2	RK7002
Q809	057G 759 2	RK7002
Q810	057G 759 2	RK7002
Q805	057G 763 14	AM9945N
Q806	057G 763 14	AM9945N
JR804	061L0805000 GP	CHIP O OHM 1/8W
JR805	061L0805000 GP	CHIP O OHM 1/8W
JR807	061L0805000 GP	CHIP O OHM 1/8W
JR801	061L0805000 GP	CHIP O OHM 1/8W
R836	061L0805102 GP	CHIPR 1K OHM +-5% 1/8W
R843	061L0805102 GP	CHIPR 1K OHM +-5% 1/8W
R920	061L0805102 GP	CHIPR 1K OHM +-5% 1/8W
R921	061L0805102 GP	CHIPR 1K OHM +-5% 1/8W
R922	061L0805102 GP	CHIPR 1K OHM +-5% 1/8W
R812	061L0805103 GP	CHIPR 10K OHM +-5% 1/8W
R912	061L0805103 GP	CHIPR 10K OHM +-5% 1/8W
R803	061L0805103 GP	CHIPR 10K OHM +-5% 1/8W
R804	061L0805103 GP	CHIPR 10K OHM +-5% 1/8W

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R806	061L0805103	GP	CHIPR 10K OHM +-5% 1/8W
R913	061L0805104	GP	CHIPR 100K OHM+-5% 1/8W
R815	061L0805104	GP	CHIPR 100K OHM+-5% 1/8W
R860	061L0805105	GP	CHIP IMOHM 0805
R849	061L0805105	GP	CHIP IMOHM 0805
R848	061L0805105	GP	CHIP IMOHM 0805
R847	061L0805105	GP	CHIP IMOHM 0805
R846	061L0805105	GP	CHIP IMOHM 0805
R816	061L0805105	GP	CHIP IMOHM 0805
R813	061L0805105	GP	CHIP IMOHM 0805
R810	061L0805105	GP	CHIP IMOHM 0805
R926	061L0805202	GP	RST CHIPR 2KOHM +-5% 1/8W
R924	061L0805240 1F	GP	CHIPR 2.4KOHM +-1% 1/8W
R802	061L0805304	GP	RST CHIPR 300KOHM +-5% 1/8W
R923	061L0805330 2F	GP	CHIP 33KOHM 1/8W +-1%
R826	061L0805360 0F	GP	RST CHIPR 360OHM +-1% 1/8W
R925	061L0805360 1F	GP	CHIP 3.6KOHM 1/8W 1%
R817	061L0805393	GP	RST CHIPR 39KOHM +/-5% 1/8W
R809	061L0805394	GP	RST CHIPR 390KOHM +-5% 1/8W
R841	061L0805430 0F	GP	RST CHIPR 430OHM +-1% 1/8W
R853	061L0805472	GP	CHIRP 4.7K OHM +-5% 1/8W
R852	061L0805472	GP	CHIRP 4.7K OHM +-5% 1/8W
R850	061L0805472	GP	CHIRP 4.7K OHM +-5% 1/8W
R808	061L0805474	GP	RST CHIPR 470KOHM +-5% 1/8W
R825	061L0805513	GP	CHIP 51 KOHM 0805
R824	061L0805751	GP	RST CHIPR 750OHM +-5% 1/8W
R858	061L0805751	GP	RST CHIPR 750OHM +-5% 1/8W
R827	061L0805752	GP	RST CHIPR 7.5KOHM +/-5% 1/8W
R831	061L0805752	GP	RST CHIPR 7.5KOHM +/-5% 1/8W
R814	061L0805754	GP	RST CHIPR 750KOHM +-5% 1/8W
R823	061L0805823	GP	CHIPR 82K OHM+-5% 1/8W
R830	061L0805823	GP	CHIPR 82K OHM+-5% 1/8W
R811	061L0805913	GP	CHIP 91K OHM 0805
JR803	061L1206000	GP	CHIPR 0 OHM +-5% 1/4W
JR808	061L1206000	GP	CHIPR 0 OHM +-5% 1/4W
JR911	061L1206000	GP	CHIPR 0 OHM +-5% 1/4W
JR910	061L1206000	GP	CHIPR 0 OHM +-5% 1/4W
JR806	061L1206000	GP	CHIPR 0 OHM +-5% 1/4W

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JR901	061L1206000	GP	CHIPR 0 OHM +-5% 1/4W
JR902	061L1206000	GP	CHIPR 0 OHM +-5% 1/4W
JR912	061L1206000	GP	CHIPR 0 OHM +-5% 1/4W
JR809	061L1206000	GP	CHIPR 0 OHM +-5% 1/4W
R916	061L1206101	GP	CHIP 100 OHM 5% 1/4W
R934	061L1206101	GP	CHIP 100 OHM 5% 1/4W
R935	061L1206101	GP	CHIP 100 OHM 5% 1/4W
R937	061L1206101	GP	CHIP 100 OHM 5% 1/4W
R936	061L1206101	GP	CHIP 100 OHM 5% 1/4W
R906	061L1206101	GP	CHIP 100 OHM 5% 1/4W
R911	061L1206102	GP	CHIP 1K OHM 5% 1/4W
R927	061L1206103	GP	CHIP 10KOHM 5% 1/4W
R938	061L1206104	GP	RST CHIPR 100KOHM +-1% 1/4W
R931	061L1206104	GP	RST CHIPR 100KOHM +-1% 1/4W
R904	061L1206104	GP	RST CHIPR 100KOHM +-1% 1/4W
R910	061L1206220	GP	22 OHM/1206
R807	061L1206220	GP	22 OHM/1206
R829	061L1206300	GP	RST CHIPR 30 OHM +-5% 1/4W
R828	061L1206300	GP	RST CHIPR 30 OHM +-5% 1/4W
R819	061L1206300	GP	RST CHIPR 30 OHM +-5% 1/4W
R818	061L1206300	GP	RST CHIPR 30 OHM +-5% 1/4W
R864	061L1206300	GP	RST CHIPR 30 OHM +-5% 1/4W
R863	061L1206300	GP	RST CHIPR 30 OHM +-5% 1/4W
R862	061L1206300	GP	RST CHIPR 30 OHM +-5% 1/4W
R861	061L1206300	GP	RST CHIPR 30 OHM +-5% 1/4W
R909	061L1206339	GP	RST CHIPR 3.3OHM +-5% 1/4W
R805	061L1206471	GP	CHIP 470 OHM 1/8W
R919	061L1206471	GP	CHIP 470 OHM 1/8W
R851	061L1206472	GP	CHIP 4.7KOHM 5% 1/4W
R837	061L1206519	GP	CHIPR 5.1 OHM +-5% 1/4W
R842	061L1206519	GP	CHIPR 5.1 OHM +-5% 1/4W
R901	061L1206684	GP	CHIPR 680K OHM+-5% 1/4W
R902	061L1206684	GP	CHIPR 680K OHM+-5% 1/4W
R903	061L1206684	GP	CHIPR 680K OHM+-5% 1/4W
C805	065G0805102 31	GP	CHIP 1000PF 50V NPO 0805
C807	065G0805103 32	GP	MLCC 0805 10NF K 50V X7R
C803	065G0805103 32	GP	MLCC 0805 10NF K 50V X7R
C839	065G0805104 32	GP	CHIP 0.1UF 50V X7R

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C838	065G0805104 32 GP	CHIP 0.1UF 50V X7R
C829	065G0805104 32 GP	CHIP 0.1UF 50V X7R
C828	065G0805104 32 GP	CHIP 0.1UF 50V X7R
C801	065G0805104 32 GP	CHIP 0.1UF 50V X7R
C842	065G0805104 32 GP	CHIP 0.1UF 50V X7R
C843	065G0805104 32 GP	CHIP 0.1UF 50V X7R
C919	065G0805104 32 GP	CHIP 0.1UF 50V X7R
C918	065G0805104 32 GP	CHIP 0.1UF 50V X7R
C917	065G0805104 32 GP	CHIP 0.1UF 50V X7R
C916	065G0805104 32 GP	CHIP 0.1UF 50V X7R
C844	065G0805104 32 GP	CHIP 0.1UF 50V X7R
C804	065G0805105 22 GP	CHIP 1UF 25V X7R 0805
C806	065G0805105 22 GP	CHIP 1UF 25V X7R 0805
C840	065G0805105 22 GP	CHIP 1UF 25V X7R 0805
C909	065G0805221 31 GP	MLCC 0805 220PF J 50V NPO
C814	065G0805224 22 GP	CAIP CAP 0.22 uF 25V X7R
C818	065G0805332 32 GP	MLCC 0805 3300PF K 50V X7R
C827	065G0805332 32 GP	MLCC 0805 3300PF K 50V X7R
C810	065G0805471 31 GP	MLCC 0805 470PF J 50V NPO
C910	065G0805471 31 GP	MLCC 0805 470PF J 50V NPO
C820	065G0805471 31 GP	MLCC 0805 470PF J 50V NPO
C831	065G0805471 31 GP	MLCC 0805 470PF J 50V NPO
C809	065G0805473 32 GP	MLCC 0805 47NF K 50V X7R
C819	065G0805473 32 GP	MLCC 0805 47NF K 50V X7R
C808	065G0805682 31 GP	MLCC 0805 6800PF J 50V NPO
C908	065G1206104 32 GP	CHIP 0.1UF 25V X7R 1206
C812	065G1206332 72 GP	CHIP 1206 3300PF K 500V X7R
C813	065G1206332 72 GP	CHIP 1206 3300PF K 500V X7R
C822	065G1206332 72 GP	CHIP 1206 3300PF K 500V X7R
C823	065G1206332 72 GP	CHIP 1206 3300PF K 500V X7R
D802	093G 64 33	DIO SIG SM BAV99 (PHSE)R
D804	093G 64 33	DIO SIG SM BAV99 (PHSE)R
D801	093G 64 33	DIO SIG SM BAV99 (PHSE)R
D803	093G 64 33	DIO SIG SM BAV99 (PHSE)R
D805	093G 64 33	DIO SIG SM BAV99 (PHSE)R
D806	093G 64 33	DIO SIG SM BAV99 (PHSE)R
D904	093G 6432S	IN4148W
D903	093G 6432S	IN4148W

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D811	093G 6432S	IN4148W
D813	093G 6432S	IN4148W
D812	093G 6432S	IN4148W
D810	093G 6432S	IN4148W
D809	093G 6432S	IN4148W
ZD905	093G 39S 12 T	RLZ20B LLDS
ZD902	093G 39S 24 T	RLZ 5.6B LLDS
ZD801	093G 39S 24 T	RLZ 5.6B LLDS
ZD903	093G 39S 38 T	PTZ 9.1B
ZD901	093G 39S 40 T	RLZ 13B LLDS
ZD904	093G 39S 44 T	RLZ18B LLDS
	PW1942AUS6AIP	POWER BOARD FOR AI
CN101	033G8034 6J HS GP	WAFER
R101	061L0603223 GP	CHIP 22KOHM 1/16W
R104	061L0603223 GP	CHIP 22KOHM 1/16W
R105	061L0603303 GP	CHIP 30K OHM 5% 1/10W
R102	061L0603303 GP	CHIP 30K OHM 5% 1/10W
R103	061L0603473 GP	CHIP 47K OHM 1/10W
C110	065G0603102 32 GP	1000PF +-10% 50V X7R
C109	065G0603102 32 GP	1000PF +-10% 50V X7R
C108	065G0603102 32 GP	1000PF +-10% 50V X7R
C107	065G0603102 32 GP	1000PF +-10% 50V X7R
C106	065G0603102 32 GP	1000PF +-10% 50V X7R
SW101	077G 605 11FD GP	TACT SWITCH SMT SFKRRMA2A20T
SW102	077G 605 11FD GP	TACT SWITCH SMT SFKRRMA2A20T
SW103	077G 605 11FD GP	TACT SWITCH SMT SFKRRMA2A20T
SW104	077G 605 11FD GP	TACT SWITCH SMT SFKRRMA2A20T
SW105	077G 605 11FD GP	TACT SWITCH SMT SFKRRMA2A20T
SW106	077G 605 11FD GP	TACT SWITCH SMT SFKRRMA2A20T
DP101	081G 14 6A KT GP	LED
ZD105	093G 39S 34 T	UDZS5.6B
ZD104	093G 39S 34 T	UDZS5.6B
ZD101	093G 39S 34 T	UDZS5.6B
ZD102	093G 39S 34 T	UDZS5.6B
ZD103	093G 39S 34 T	UDZS5.6B
	715G2070 B GP	KEY BOARD PCB
CN901	006G 31500 GP	EYELET
PT802	006G 31502 GP	1.5MM RIVET

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PT801	006G 31502 GP	1.5MM RIVET
NR901	006G 31502 GP	1.5MM RIVET
L902	006G 31502 GP	1.5MM RIVET
L901	006G 31502 GP	1.5MM RIVET
FB901	006G 31502 GP	1.5MM RIVET
F901	006G 31502 GP	1.5MM RIVET
C905	006G 31502 GP	1.5MM RIVET
Q903	006G 31502 GP	1.5MM RIVET
R914	006G 31502 GP	1.5MM RIVET
T901	006G 31502 GP	1.5MM RIVET
IC903	056G 158 12	KIA431A-AT/P TO-92
R822	061G212Y625 KT GP	MATEL GLAZE 6.2M OHM 3KV 1/2W
R832	061G212Y625 KT GP	MATEL GLAZE 6.2M OHM 3KV 1/2W
C930	065G 2K152 1T GP	CERAMIC CAP
C931	065G 2K152 1T GP	CERAMIC CAP
C932	065G 2K152 1T GP	CERAMIC CAP
C933	065G 2K152 1T GP	CERAMIC CAP
C934	065G 2K152 1T GP	CERAMIC CAP
C906	067G 2151007NT GP	KY50VB10M-TP5(5*11)
C907	067G 2151007NT GP	KY50VB10M-TP5(5*11)
JP817	095G 90 23 GP	TIN COATED
JP818	095G 90 23 GP	TIN COATED
JP819	095G 90 23 GP	TIN COATED
JP820	095G 90 23 GP	TIN COATED
JP901	095G 90 23 GP	TIN COATED
JP902	095G 90 23 GP	TIN COATED
JP903	095G 90 23 GP	TIN COATED
JP904	095G 90 23 GP	TIN COATED
JP905	095G 90 23 GP	TIN COATED
JP906	095G 90 23 GP	TIN COATED
JP907	095G 90 23 GP	TIN COATED
JP910	095G 90 23 GP	TIN COATED
JP911	095G 90 23 GP	TIN COATED
JP913	095G 90 23 GP	TIN COATED
JP914	095G 90 23 GP	TIN COATED
JP915	095G 90 23 GP	TIN COATED
JP916	095G 90 23 GP	TIN COATED
JP917	095G 90 23 GP	TIN COATED

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JP918	095G 90 23 GP	TIN COATED
JP919	095G 90 23 GP	TIN COATED
JP920	095G 90 23 GP	TIN COATED
JR802	095G 90 23 GP	TIN COATED
JP801	095G 90 23 GP	TIN COATED
JP803	095G 90 23 GP	TIN COATED
JP805	095G 90 23 GP	TIN COATED
JP807	095G 90 23 GP	TIN COATED
JP808	095G 90 23 GP	TIN COATED
JP809	095G 90 23 GP	TIN COATED
JP811	095G 90 23 GP	TIN COATED
JP812	095G 90 23 GP	TIN COATED
JP815	095G 90 23 GP	TIN COATED
	715G1899 1A GP	POWER BOARD PCB

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